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 NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the
 present
 NEWS 4 Jul 15 Data from 1960-1976 added to RDISCLOSURE
 NEWS 5 Jul 21 Identification of STN records implemented
 NEWS 6 Jul 21 Polymer class term count added to REGISTRY
 NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and
 Right Truncation available
 NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
 August 1, 2003
 NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN
 NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in
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 NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in
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 NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in
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 NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in
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 NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE
 NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL
 NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right
 Truncation
 NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR
 NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
 MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
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=> s water and surfactant and glyceride

h eb c g cg b cg eb

L1 1626 WATER AND SURFACTANT AND GLYCERIDE

=> s l1 and (fuel or coal)

L2 24 L1 AND (FUEL OR COAL)

=> d l2 1-24 all

L2 ANSWER 1 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full
Text

AN 2003-570424 [54] WPIDS

DNN N2003-453406 DNC C2003-154238

TI Production of graft copolymers, comprises radical polymerization of a monomer onto a polymer in a liquid phase comprising a liquid diluent and a phase mediator.

DC A13 A85 L03 X16

IN HUSLAGE, J; RAGER, T

PA (OPEL) OPEL AG ADAM

CYC 1

PI DE 10108598 A1 20020905 (200354)* 10p C08F002-00

ADT DE 10108598 A1 DE 2001-10108598 20010222

PRAI DE 2001-10108598 20010222

IC ICM C08F002-00

ICS C08F291-00

AB DE 10108598 A UPAB: 20030821

NOVELTY - Production of graft copolymers by radical polymerization of monomer onto a polymer in a liquid phase comprising a liquid diluent, comprises polymerization in the presence of substance that acts as phase mediator between diluent and monomer, provided that mixture of diluent and phase mediator does not dissolve or swell the graft copolymer product. The polymer is insoluble in the liquid phase and the monomer is insoluble in the diluent.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a process for producing an ion-exchange membrane, comprising introducing ionic groups into a graft copolymer produced as above.

USE - The graft copolymers (claimed) are useful for producing ion-exchange membranes (claimed) for use as polymer electrolytes in fuel cells.

ADVANTAGE - The degree of grafting can be controlled by varying the amount of phase mediator used.

Dwg.0/2

FS CPI EPI

FA AB

MC CPI: A10-C03B; A12-E06B; A12-M03; L03-E04A2

EPI: X16-C01C; X16-F02; X16-J01A

L2 ANSWER 2 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full
Text

AN 2001-138049 [14] WPIDS

DNC C2001-040596

TI Cleansing composition useful in personal care products particularly make-up remover comprises a liquid silicone, an ester and a water dispersible component.

DC A96 D21 E19

IN KAMINSKI, C; LUKENBACH, E R; PASCAL-SUISSE, S; RUGGIERO, M; TAHAR, M

PA (JOHJ) JOHNSON & JOHNSON CONSUMER CO INC; (KAMI-I) KAMINSKI C; (LUKE-I)

LUKENBACH E R; (PASC-I) PASCAL-SUISSE S; (RUGG-I) RUGGIERO M; (TAHA-I)

TAHAR M

CYC 95

PI WO 2001001949 A1 20010111 (200114)* EN 70p A61K007-48

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM

h eb c g cg b cg

eb

DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE
SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2000057648 A 20010122 (200125) A61K007-48
US 2002035046 A1 20020321 (200224) A61K007-75
EP 1216685 A2 20020626 (200249) # EN A61K007-00

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT
RO SE SI TR

AU 2001097359 A 20020627 (200254) # A61K009-107
CA 2365818 A1 20020621 (200254) # EN A61K031-222
CN 1366874 A 20020904 (200281) # A61K007-043
JP 2002322045 A 20021108 (200305) # 77p A61K007-48
KR 2002060054 A 20020716 (200305) # A61K007-00

ADT WO 2001001949 A1 WO 2000-US17431 20000623; AU 2000057648 A AU 2000-57648
20000623; US 2002035046 A1 Provisional US 1999-141927P 19990701, CIP of US
2000-604563 20000627, US 2000-745270 20001221; EP 1216685 A2 EP
2001-310796 20011221; AU 2001097359 A AU 2001-97359 20011221; CA 2365818
A1 CA 2001-2365818 20011221; CN 1366874 A CN 2001-125342 20011221; JP
2002322045 A JP 2001-402978 20011221; KR 2002060054 A KR 2001-82797
20011221

FDT AU 2000057648 A Based on WO 2001001949

PRAI US 1999-141927P 19990701; EP 2001-310796 20011221; AU 2001-97359
20011221; CA 2001-2365818 20011221; CN 2001-125342 20011221; JP
2001-402978 20011221; KR 2001-82797 20011221

IC ICM A61K007-00; A61K007-043; A61K007-48; A61K007-75; A61K009-107;
A61K031-222

ICS A61K007-02; A61K007-04; A61K007-06; A61K007-075; A61K007-08;
A61K007-50; A61K031-07; A61K031-19; A61K031-21; A61K031-225;
A61K031-23; A61K031-235; A61K031-25; A61K031-355; A61K031-496;
A61K031-506; A61K031-569; A61K031-60; A61K038-48; A61P017-00;
A61P017-06; A61P017-08; A61P017-10; A61P017-14; A61P017-16;
A61P039-00; A61P043-00

AB WO 200101949 A UPAB: 20011220

NOVELTY - A cleansing composition which is stable, economically-feasible
and can effectively remove the residue from sebum as well as the residue
from make-up and hair protecting agents, but also impart a non-oily feel.

DETAILED DESCRIPTION - A cleansing (C1) comprises a liquid silicone

(a), a **water** dispersible component (b) and an ester (c).

INDEPENDENT CLAIMS are included for:

(A) a cleansing system (S1) comprising (C1), **water**, a polymeric
emulsifier (d) and/or a thickener (e);

(B) treating hair loss, inhibiting hair growth, treating acne,
reducing the signs of aging and other manifestations of photodamage,
depigmenting the skin, treating the symptoms and/or the diseases of
dandruff, seborrheic dermatitis and/or psoriasis involves topically
applying a mixture of (S1) and a hair loss treatment agent (f), hair
growth inhibiting agent (g), anti-acne agent (h), anti-aging agent (i),
depigmentation benefit agent (j) or a benefit agent (k) respectively to
the desired location of an animal or human;

(C) a foaming composition comprising (b), (c), **water** and a foaming
surfactant (l);

(D) making an oil-in **water** emulsion which involves (i) combining a
lipophilic phase with a hydrophilic phase; and (ii) neutralizing a
hydrophilic thickening agent (m) in the hydrophilic phase with a
neutralizer. The hydrophilic phase comprises a polymeric emulsifier;

(E) making a **water**-in oil emulsion which involves (ii) followed by
(i); and

(F) depositing a benefit agent into and/or onto the skin, hair and/or
nails involves applying a composition comprising: either an optional (a),
(b), (c), (d) and/or (f), and a benefit agent (n); or (a), (b), (c),
water, (l) and (n).

USE - In personal care products (particularly make-up remover)
(claimed).

ADVANTAGE - The cleansing compositions not only impart superior

cleansing properties, but also are relatively non-irritating and thus suitable for use by people having sensitive skin and eyes. The compositions effectively deliver and/or deposit different benefit agents into and onto the skin.

Dwg.0/5

FS CPI

FA AB; DCN

MC CPI: A06-A00E3; A12-V04A; A12-V04C; D08-B01; D08-B03; E05-E; E05-E01; E05-E02; E10-E04G; E10-E04K; E10-G02F1; E10-G02F2; E10-G02G2; E10-G02H2

L2 ANSWER 3 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full
Text

AN 2001-024575 [03] WPIDS

DNC C2001-007377

TI **Fuel** composition for use in internal combustion engine comprises hydrocarbon **fuel**, polar fluid and an emulsifier comprising non-cyclic polyol fatty acid esters and non-cyclic polyol fatty alcohol ethers.

DC E17 H06

IN KLAUSMEIER, W H

PA (PURE-N) PURE FUELS USA INC

CYC 91

PI WO 2000063322 A1 20001026 (200103)* EN 69p C10L001-02

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL
OA PT SD SE SL SZ TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ
EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK
LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI
SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

AU 2000048008 A 20001102 (200107) C10L001-02

ADT WO 2000063322 A1 WO 2000-US10862 20000421; AU 2000048008 A AU 2000-48008 20000421

FDT AU 2000048008 A Based on WO 2000063322

PRAI US 1999-130534P 19990421

IC ICM C10L001-02

AB WO 200063322 A UPAB: 20010116

NOVELTY - **Fuel** composition comprises a hydrocarbon **fuel**, a polar fluid and an emulsifier capable of forming emulsion. The emulsifier essentially comprises non-cyclic polyol fatty acid esters and non-cyclic polyol fatty alcohol ethers.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) Method of formulating a hydrocarbon **fuel** by adding a polar fluid and an emulsifier to the **fuel**.

(2) Synthesis of polyol fatty acid ester by protecting all except preselected reactive alcohol groups of polyol having at least three reactive alcohol groups, by reacting with single protecting group capable of protecting one or more reactive alcohol groups. A fatty acid is linked to the polyol through an ester linkage by reacting the fatty acid with the preselected reactive alcohol groups. The protecting groups are removed and polyol fatty acid ester is formed. The entire process is carried out under conditions that would not reduce the unsaturated fatty acid.

(3) Method of separating polyol monoesters particularly mono **glycerides** from a mixture of polyol monoesters (mono **glycerides**) and polyol multiester particularly multiglycerides, with the polyol containing at least four carbon chains. The method involves contacting an extraction fluid having a non-polar component and polar component with the mixture and preferentially associating the polyol monoester with the polar component and the polyol multi-ester with the non-polar component. The polyol monoester is at least partially separated from the polyol multiester by separating the polar component from the non-polar component.

USE - **Fuel** for internal combustion engine (claimed) and for heat, electricity and propulsion purposes.

ADVANTAGE - The **fuel** components are present in amount effective to reduce emission of nitrogen oxides and particulates by a threshold amount upon combustion of diesel composition, compared with diesel **fuel** alone. The constituents of the **fuel** composition are obtained from renewable resources so that the cost is reduced. The composition has excellent thermal stability.

Dwg.0/6

FS CPI

FA AB; DCN

MC CPI: E10-E04G; E10-E04J; E10-E04K; E10-E04L; E10-E04M3; H06-B

L2 ANSWER 4 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full
Text

AN 1992-416130 [51] WPIDS

TI Prepn. of fatty acid ester(s) of short chain alcohol(s) - by several stage re-esterification of fatty acid **glyceride**(s) with mono hydric alcohol(s) or mono alkylated diol(s) using basic catalysts.

DC B05 D13 D21 D23 E17 H06 H07

IN WIMMER, T

PA (WIMM-I) WIMMER T

CYC 40

PI AT 9102200 A 19921115 (199251)* C11C003-10

WO 9309212 A1 19930513 (199320)B 17p C11C003-04

RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL OA SE

W: AT AU BB BG BR CA CH CS DE DK ES FI GB HU JP KP KR LK LU MG MN MW

NL NO PL RO RU SD SE UA US

AU 9228809 A 19930607 (199338) C11C003-04

AT 397510 B 19940315 (199413)

HU 66403 T 19941128 (199502) C11C003-04

CZ 9401116 A3 19950215 (199514) C11C003-04

EP 658183 A1 19950621 (199529) DE C11C003-04

R: AT BE CH DE DK ES FR IT LI SE

US 5434279 A 19950718 (199534) 5p

EP 658183 B1 19970312 (199715) DE 7p C11C003-04

R: AT BE CH DE DK ES FR IT LI SE

DE 59208211 G 19970417 (199721) C11C003-04

HU 212123 B 19960228 (199740) C11C003-04

ADT AT 9102200 A AT 1991-2200 19911106; WO 9309212 A1 WO 1992-AT136 19921103; AU 9228809 A AU 1992-28809 19921103; AT 397510 B AT 1991-2200 19911106; HU 66403 T WO 1992-AT136 19921103, HU 1994-1330 19921103; CZ 9401116 A3 CZ 1994-1116 19921103; EP 658183 A1 EP 1992-922141 19921103, WO 1992-AT136 19921103; US 5434279 A WO 1992-AT136 19921103, US 1994-232285 19940506; EP 658183 B1 EP 1992-922141 19921103, WO 1992-AT136 19921103; DE 59208211 G DE 1992-508211 19921103, EP 1992-922141 19921103, WO 1992-AT136 19921103; HU 212123 B WO 1992-AT136 19921103, HU 1994-1330 19921103

FDT AU 9228809 A Based on WO 9309212; AT 397510 B Previous Publ. AT 9102200; HU 66403 T Based on WO 9309212; EP 658183 A1 Based on WO 9309212; US 5434279 A Based on WO 9309212; EP 658183 B1 Based on WO 9309212; DE 59208211 G Based on EP 658183, Based on WO 9309212; HU 212123 B Previous Publ. HU 66403, Based on WO 9309212

PRAI AT 1991-2200 19911106

REP 2.Jnl.Ref; AT 394571; BR 8300429; DE 3707563; EP 127104; EP 131991; WO 9115452

IC ICM C11C003-04; C11C003-10

FS CPI

FA AB

MC CPI: B10-G02; D10-B02; E10-G02C; E10-G02E; H06-B; H06-B04; H07-A; H08-D05

L2 ANSWER 5 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full
Text

AN 1991-288385 [40] WPIDS

DNC C1991-124726

h eb c g cg b cg eb

TI Prod'n. of fatty acid lower alcohol ester(s) - by transesterification of **glyceride(s)** under specified conditions.

DC B05 D13 D21 D25 E17 H06

IN WIMMER, T

PA (VOGE-N) VOGEL & NOOT INDUSTRIEANLAGENBAU; (WIMM-I) WIMMER T; (VOGE-N) VOGEL & NOOT IND GMBH; (VOGE-N) VOGEL & NOOT IND; (VOGE-N) VOGEL & NOOT IND GMBH

CYC 24

PI AT 9001386 A 19910915 (199140)*

WO 9200268 A 19920109 (199205)B DE 15p

RW: AT BE CH DE DK ES FR GB GR IT LU NL SE

W: AU BG BR HU PL SU US

AU 9180742 A 19920227 (199218)

ZA 9104972 A 19920429 (199222) 13p C11C

EP 489883 A1 19920617 (199225) DE C07C067-03

HU 59369 T 19920528 (199227) C07C067-03

BR 9105796 A 19920922 (199243) C07C067-03

CS 9200587 A2 19921014 (199311) C07C067-03

AU 641525 B 19930923 (199345) C07C067-03

HU 209912 B 19941128 (199502) C07C067-03

US 5399731 A 19950321 (199517) 5p C11C003-10

CZ 279421 B6 19950412 (199523) C07C067-03

RU 2058298 C1 19960420 (199703) 7p C07C067-03

ADT AT 9001386 A AT 1990-1386 19900629; ZA 9104972 A ZA 1991-4972 19910627; EP 489883 A1 EP 1991-912029 19910628; WO 1991-AT76 19910628; HU 59369 T WO 1991-AT76 19910628; HU 1992-464 19910628; BR 9105796 A BR 1991-5796 19910628; WO 1991-AT76 19910628; CS 9200587 A2 CS 1992-587 19920227; AU 641525 B AU 1991-80742 19910628; HU 209912 B WO 1991-AT76 19910628; HU 1992-464 19910628; US 5399731 A WO 1991-AT76 19910628; US 1992-834255 19920310; CZ 279421 B6 CS 1992-587 19910628; RU 2058298 C1 SU 1991-5011430 19910628; WO 1991-AT76 19910628

FDT EP 489883 A1 Based on WO 9200268; HU 59369 T Based on WO 9200268; BR 9105796 A Based on WO 9200268; AU 641525 B Previous Publ. AU 9180742, Based on WO 9200268; HU 209912 B Previous Publ. HU 59369, Based on WO 9200268; US 5399731 A Based on WO 9200268; CZ 279421 B6 Previous Publ. CS 9200587

PRAI AT 1990-1386 19900629; WO 1991-AT76 19910628

REP DE 3020612; DE 3107318; WO 9105034

IC ICM C07C067-03; C11C003-10; C11C017-00

ICS C07C069-24; C07C069-52; C11C003-04

AB AT 9001386 A UPAB: 19961211

Prod'n. of fatty acid esters (I) of 1-5C monohydric alcohols (II) is effected by (a) transesterifying fatty acid **glycerides** (III) with (II) in the presence of an alkaline earth metal base (IV); (b) adding **water** or a dil. acid or a dil. soln. of an acidic salt in an amt. of 0.1-5 wt.% while stirring; and (c) separating (I) as upper phase after settling. The amt. of (II) used is 1.1-1.8 moles per mole of fatty acid gps. in (III). The amt. of (IV) used is x + y moles, where x is at least 0.025 moles per 100g (III), and y is 1 equiv. per mole of free fatty acids in (III).

USE/ADVANTAGE - (I) are useful as pharmaceutical, dietetic or cosmetic raw materials, diesel **fuels**, heating oils or intermediates for prod'n. of fatty alcohols, **surfactants**, lubricants, etc.. The process may be operated at ambient temp. and atmospheric pressure using simple equipment, uses only a small excess of (II), and gives yields of up to 100%. (Abstract replaced; based on WO9200268, First major country equivalent to AT9001386)

FS CPI

FA AB; DCN

MC CPI: B10-G02; D03-C; D03-H01T; D08-B; D10-A01; E10-G02E; H06-B04; H06-B05; H07-A; H08-E05

L2 ANSWER 6 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full
Text

h eb c g cg b cg

eb

AN 1991-218424 [30] WPIDS
 DNC C1991-094862
 TI Lyso-lecithin compsn., for improved fluidity, etc. - contg. lyso-lecithin, middle linear fatty acid tri **glyceride**, and free fatty acid, for improved **water** dispersibility.
 DC D13
 PA (SHOS) SHOWA SANGYO CO
 CYC 1
 PI JP 03139246 A 19910613 (199130)* 4p
JP 2821779 B2 19981105 (199849) 5p A23J007-00
 ADT JP 03139246 A JP 1989-274844 19891024; JP 2821779 B2 JP 1989-274844 19891024
 FDT JP 2821779 B2 Previous Publ. JP 03139246
 PRAI JP 1989-274844 19891024
 IC A23J007-00; A23L001-03; B01F017-14; C07F009-10
 ICM A23J007-00
 ICS A23L001-03; A23L001-035; B01F017-14; C07F009-10
 AB JP 03139246 A UPAB: 19930928
 Lysolecithin compsn. contains (a) lysolecithin of 90-99 w/w%, (b) middle linear fatty acid triglyceride of 1-10 w/w% and opt. (c) free fatty acid or below 5 w/w%. Pref. lysolecithin is prep'd. by treating lecithin originated from soybeans, corn, rapeseed, yolk, etc. with phospholipase for lysolising rate 10-100% (30-100%). As free fatty acid linolic, oleic, stearic or palmitic-acid, etc. can be used and for improving fluidity of lysolecithin, linolic- and oleic-acid are pref. used. Lecithin has been used widely as **surfactant**, antioxidant and emulsifier in food, as additive for lubricant, **fuel** oil, etc., surface-treating agent in textile and electronic-industry, etc. and functional food showing blood pressure-suppressing activity. It has defects in hydrophilic property and emulsion stability and by converting it to lysolecithin, those defects are mitigated. Lysolecithin has had defects in preservative stability, emulsifying property, etc..
 USE/ADVANTAGE - By combining small amt. of middle linear fatty acid triglyceride and opt. free fatty acid, fluidity, **water** dispersibility, emulsifying property, etc. of lysolecithin can be improved and compsn. also has good preservative stability. @ (4pp Dwg.No.0/0)
 FS CPI
 FA AB
 MC CPI: D10-B01

L2 ANSWER 7 OF 24 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN

Full
Text

AN 1985-244157 [40] WPIDS
 DNC C1985-105763
 TI **Surfactant** contg. specified anionic gps. - of use in forming oil-**water** emulsions in which the aq. phase has a high dissolved inorganic content.
 DC A17 A97 E19 H07 H08
 IN BAKER, A S
 PA (ICIL) IMPERIAL CHEM IND PLC
 CYC 14
 PI EP 156572 A 19851002 (198540)* EN 15p
 R: BE CH DE FR GB IT LI NL SE
GB 2157700 A 19851030 (198544)
AU 8540062 A 19850926 (198546)
JP 60212214 A 19851024 (198549)
ZA 8501857 A 19851121 (198609)
ES 8603562 A 19860416 (198625)
CA 1244463 A 19881108 (198849)
 ADT EP 156572 A EP 1985-301640 19850308; GB 2157700 A GB 1985-6009 19850308;
ZA 8501857 A ZA 1985-1851 19850312; ES 8603562 A ES 1985-541468 19850321
 PRAI GB 1984-7300 19840321; GB 1985-6009 19850308
 REP A3...8647; DE 1270723; FR 1464331; GB 1054276; GB 1059847; No-SR.Pub; US 3502677; US 3833624; US 4148605

h ebc g cg b cg

eb

IC B01F017-00; C08F008-00; C08F110-10; C10M145-18; C10M151-04; C10M153-04;
C10M173-00; C10N040-08; C11D001-12; C11D003-06

AB EP 156572 A UPAB: 19930925

A cpd. (I) contains in the molecule a hydrophobic component (A) and a hydrophilic component (B) covalently bonded together; (A) is a satd. or unsatd. 30-500C hydrocarbon group, and (B) contains a phosphate, phosphonate, sulphate, sulphonate or carboxymethyl anionic group.

Pref. component A is the polymer of a 2-6C monolefin, or the residue of a poly(isobutenyl) succinic anhydride (C) of mol.wt. 400-5000. I may be neutralised with ammonia or an inorganic or organic base.

USE/ADVANTAGE - Cpds. I are of use as **surfactants**, e.g. emulsifiers, in liquid systems containing an oil phase and an aq. phase, and as dispersants in non-aq. systems. They do not lose their efficiency at high temps., e.g. 100 deg.C. Fatty **glycerides**, mineral oils, hydrocarbon **fuel** oils, liquid hydrocarbons, synthetic lubricants, bitumens, waxes and polyolefins may be emulsified in **water**; the **water** phase may contain a high dissolved inorganic content, e.g. of sodium, magnesium or calcium chloride. The emulsions are of use as hydraulic fluids, cutting oils and other metal-working fluids.

O/O

FS CPI

FA AB

MC CPI: A08-S05; A12-W02A; A12-W12C; E05-G02; E05-G03D; E05-G09C; E10-A08;
E10-A09A; E10-A09B2; E10-B02D; E10-C02F; E10-C04F; H08-E05

L2 ANSWER 8 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:610334 CAPLUS

DN 139:151533

TI Method for the preparation of biliquid foam compositions

IN Guffogg, Philip Ernest; Wheeler, Derek Alfred

PA Disperse Limited, UK

SO PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM B01J013-00

ICS A61K007-06; A61K007-48

CC 47-5 (Apparatus and Plant Equipment)

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003064024	A1	20030807	WO 2003-GB421	20030131
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI GB 2002-2312 A 20020131

AB A method for the prepn. of a polyaphron (or biliquid foam) which does not rely upon the initial formation of a gas foam, in which a stirrer having a single or a multiplicity of blades is used, the stirrer being operated in a manner such that at least one part of the stirrer mechanism breaks the interface between the continuous polar phase used to form the biliquid foam and the air, the non-polar phase being added dropwise at least initially while stirring the continuous polar phase and the rate of addn. of the non-polar phase being controlled so that a biliquid foam compn. is formed.

ST polyaphron formation stirrer; biliquid foam formation stirrer

IT Alcohols, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (C12-13, ethoxylated, C12-13 Pareth-3; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT **Glycerides**, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (C8-10; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Kerosene
 RL: TEM (Technical or engineered material use); USES (Uses)
 (Finalan 75; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Fats and Glyceridic oils, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (avocado; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (di-Me, Me hydrogen polysiloxane-; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Polysiloxanes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (di-Me, Me hydrogen, polyoxyalkylene-; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Cyclosiloxanes
 RL: MOA (Modifier or additive use); USES (Uses)
 (di-Me; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Castor oil
 RL: MOA (Modifier or additive use); USES (Uses)
 (ethoxylated, Etocas 25; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Castor oil
 RL: MOA (Modifier or additive use); USES (Uses)
 (hydrogenated, ethoxylated, Croduret 50; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Fatty acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (lanolin; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Diesel **fuel**
 Industrial process **waters**
 Odor and Odorous substances
 Petroleum products
 Polar molecules
Surfactants
 (method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Coconut oil
 Gasoline
 Soybean oil
 Sunflower oil
 RL: MOA (Modifier or additive use); USES (Uses)
 (method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Hydrocarbon oils
 RL: TEM (Technical or engineered material use); USES (Uses)
 (method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Lanolin

RL: MOA (Modifier or additive use); USES (Uses)
(oil; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT Foams
(polyaphrons; method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT 57-10-3D, Hexadecanoic acid, derivs 143-28-2, Oleyl alcohol 544-63-8D, Tetradecanoic acid, derivs 9004-82-4, Sodium Lauryl ether sulfate 9004-98-2, Oleth-10 9005-64-5, Polysorbate 20 9006-65-9, Dimethicone 16958-85-3, Octyl palmitate 31692-79-2, Dimethiconol 56275-01-5 68171-33-5, Isopropyl isostearate 195868-36-1, Phenyl trimethicone

RL: MOA (Modifier or additive use); USES (Uses)

(method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

IT 64-17-5, Ethanol, uses 67-56-1, Methanol, uses 107-21-1, Ethylene glycol, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(method for the prepn. of biliquid foam compns. from polar phase and non-polar phase using stirrers)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Alfred, W; US 6312760 B1 2001 CAPLUS
- (2) Ames, T; US 6054319 A 2000 CAPLUS
- (3) Color Access Inc; WO 0162214 A 2001 CAPLUS
- (4) Schmidt, W; WO 0105481 A 2001 CAPLUS
- (5) Sebba, F; US 4486333 A 1984 CAPLUS

L2 ANSWER 9 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:609731 CAPLUS

DN 139:151702

TI Methods of increasing flotation rate

IN Yoon, Roe-Hoan

PA USA

SO U.S. Pat. Appl. Publ., 12 pp., Division of U.S. Ser. No. 573,441.

CODEN: USXXCO

DT Patent

LA English

IC ICM B03D001-14

NCL 209164000

CC 48-1 (Unit Operations and Processes)

Section cross-reference(s): 49

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003146134	A1	20030807	US 2002-218979	20020814
US 2000-573441	A3	20000516		

AB Methods of increasing the rate of sepg. hydrophobic and hydrophilic particles by flotation were developed. They are based on using appropriate reagents to enhance the hydrophobicity of the particles to be floated, so that they can be more readily collected by the air bubbles used in flotation. The hydrophobicity-enhancing reagents include low HLB **surfactants**, naturally occurring lipids, modified lipids, and hydrophobic polymers. These methods can greatly increase the rate of flotation for the particles that are usually difficult to float, such as ultrafine particles, coarse particles, middlings, and the particles that do not readily float in the **water** contg. large amts. of ions derived from the particles. New collectors for the flotation of phosphate minerals are disclosed.

ST flotation collector hydrophobic nonionic polymer **surfactant** HLB phosphate; nonionic **surfactant** fatty glycol **glyceride** ester amide amine lipid

IT Hydrophile-lipophile balance value

h eb c g cg b cg eb

(<15; methods of increasing flotation rate with hydrophobic neutral additives)

IT Amides, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkoxylated, ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (animal; methods of increasing flotation rate with hydrophobic neutral additives)

IT Polar solvents
 (aprotic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrocarbons, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (chloro; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation agents
 (collectors; methods of increasing flotation rate with hydrophobic neutral additives)

IT Lanolin
 RL: MOA (Modifier or additive use); USES (Uses)
 (derivs.; methods of increasing flotation rate with hydrophobic neutral additives)

IT Petroleum products
 (distillates; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrophobicity
 (enhanced by additives; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fatty acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (esters; methods of increasing flotation rate with hydrophobic neutral additives)

IT Glycols, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (ethers; methods of increasing flotation rate with hydrophobic neutral additives)

IT Alcohols, uses
 Amines, uses
 Fatty acids, uses
Glycerides, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Bituminous **coal**
 RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
 (fines; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (fish; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation agents
 (frothers; methods of increasing flotation rate with hydrophobic neutral additives)

IT Ethers, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (glyceryl; methods of increasing flotation rate with hydrophobic neutral additives)

IT Ethers, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (glycol; methods of increasing flotation rate with hydrophobic neutral

additives)

IT **Glycerides**, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (hydrogenated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Particles
 (hydrophobic and hydrophilic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Polymers, uses
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (hydrophobic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation
 (increased rate of; methods of increasing flotation rate with hydrophobic neutral additives)

IT Clays, processes
 RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
 (kaolinitic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Esters, uses
 RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
 (lard, Et esters; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrocarbon oils
 RL: MOA (Modifier or additive use); USES (Uses)
 (light oils; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrocarbons, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (lower, aliph.; methods of increasing flotation rate with hydrophobic neutral additives)

IT Linear low density polyethylenes
 RL: MOA (Modifier or additive use); USES (Uses)
 (metallocene-catalyzed; methods of increasing flotation rate with hydrophobic neutral additives)

IT Bubbles
 Diesel **fuel**
 Ionic strength
 Milling (size reduction)
 Slurries
 Solvents
 (methods of increasing flotation rate with hydrophobic neutral additives)

IT Aromatic hydrocarbons, uses
 Diglycerides
 Ethers, uses
 Fatty acids, uses
Glycerides, uses
 Glycols, uses
 Kerosene
 Ketones, uses
 Ligroine
 Lime (chemical)
 Monoglycerides
 Naphtha
 Polysilanes
 Soybean oil
 RL: MOA (Modifier or additive use); USES (Uses)
 (methods of increasing flotation rate with hydrophobic neutral additives)

IT Anthracite

Coal, processes
Copper ores, processes
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(methods of increasing flotation rate with hydrophobic neutral additives)

IT Lipids, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(naturally occurring and modified; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Surfactants**
(nonionic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Minerals, processes
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(phosphate; methods of increasing flotation rate with hydrophobic neutral additives)

IT Copper ores, processes
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(porphyry; methods of increasing flotation rate with hydrophobic neutral additives)

IT Amides, uses
RL: MOA (Modifier or additive use); USES (Uses)
(reaction products from **glycerides**; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Glycerides**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(reaction products from thioesterification; methods of increasing flotation rate with hydrophobic neutral additives)

IT Alcohols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(short-chain, C1-7; methods of increasing flotation rate with hydrophobic neutral additives)

IT Polymers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(silicon-contg.; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fatty acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(tall-oil; methods of increasing flotation rate with hydrophobic neutral additives)

IT Particles
(ultrafine; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses
RL: MOA (Modifier or additive use); USES (Uses)
(vegetable, ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses
RL: MOA (Modifier or additive use); USES (Uses)
(vegetable; methods of increasing flotation rate with hydrophobic neutral additives)

IT 64-19-7, Acetic acid, uses
RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)
(methods of increasing flotation rate with hydrophobic neutral additives)

IT 50-99-7D, Glucose, esters of 56-23-5, Carbon tetrachloride, uses
57-50-1D, Sucrose, esters of 67-68-5, Dimethyl sulfoxide, uses
68-12-2, Dimethylformamide, uses 75-15-0, Carbon disulfide, uses
107-97-1D, Sarcosine, derivs. 872-50-4, N-Methylpyrrolidone, uses
1336-21-6, Ammonium hydroxide 1338-43-8, Span 80 1344-09-8, Sodium

silicate 2720-73-2, Potassium amyl xanthate 5116-94-9 7664-38-2D,
 Phosphoric acid, esters 9002-88-4D, Polyethylene, derivs. 9004-73-3D,
 Poly(methylhydrosiloxane), derivs. 12441-09-7D, Sorbitan, derivs.
572924-33-5, Shellfloat 758 572924-40-4, Aero 6973

RL: MOA (Modifier or additive use); USES (Uses)

(methods of increasing flotation rate with hydrophobic neutral
 additives)

IT 1308-56-1P, Chalcopyrite, processes 1309-56-4P, Molybdenite
1314-56-3P, Diphosphorus pentoxide (P2O5), processes 7782-42-5P,
 Graphite, processes 14807-96-6P, Talc, processes

RL: PEP (Physical, engineering or chemical process); PUR (Purification or
 recovery); PYP (Physical process); PREP (Preparation); PROC (Process)

(methods of increasing flotation rate with hydrophobic neutral
 additives)

IT 1317-70-0, Anatase 1332-37-2, Iron oxide, processes

RL: PEP (Physical, engineering or chemical process); PYP (Physical
 process); REM (Removal or disposal); PROC (Process)

(methods of increasing flotation rate with hydrophobic neutral
 additives)

L2 ANSWER 10 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:609679 CAPLUS

DN 139:135902

TI Tall-oil pitch-based and **glyceride**-based chemical change agent for
 production of solid **coal**-based synthetic **fuel** briquets

IN Giampa, Vince M.; Dubiel, John T.; Lyons, Orville

PA Ceredo Liquid Terminal Inc., USA

SO U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM C10L005-14

ICS C10L005-44; C10L005-16

NCL 044565000; 044577000

CC 51-15 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 45

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003145516	A1	20030807	US 2002-68285	20020205
PRAI	US 2002-68285		20020205		

AB A chem. change agent for prepn. of **coal**-based synthetic **fuel** briquets
 consists of **water** 0-70, tall oil and tall-oil pitch 0-60,
 C16-18-**glycerides** 0.25-40, and **surfactants** 0.25-4 wt.%, with 50-200
 cP, sulfur content <0.2 wt.%, and closed cup flash point >200°, and
 can be stable when stored as an emulsion at 21-71°. The chem.
 change agent is produced by first heating a tall-oil pitch to >93°
 and adding **water**, **glycerides**, and **surfactant** to form an emulsion.
 The **coal**-based synthetic **fuel** briquets are then prepd. from 98.8-99.5
 wt.% **coal** and 0.5-1.2 wt.% of the above emulsion, followed by pressing
 the mixt. to briquets.

ST **coal** briquet synthetic **fuel** tall oil pitch; **glyceride** tall oil pitch
coal synthetic **fuel**

IT **Glycerides**, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(C16-18, emulsions; tall-oil pitch-based and **glyceride**-based
 chem. change agent for prodn. of solid **coal**-based synthetic
fuel briquets)

IT **Fuel** briquets

(**coal**-based solids; tall-oil pitch-based and
glyceride-based chem. change agent for prodn. of solid
coal-based synthetic **fuel** briquets)

h ebc g cg b cg eb

IT Corn oil
 Cottonseed oil
 Palm oil
 Soybean oil
 Tall oil
 Tall oil pitch
 RL: TEM (Technical or engineered material use); USES (Uses)
 (emulsions; tall-oil pitch-based and **glyceride**-based chem.
 change agent for prodn. of solid **coal**-based synthetic
fuel briquets)

IT **Fuels**
 (synthetic, solid briquets; tall-oil pitch-based and **glyceride**
 -based chem. change agent for prodn. of solid **coal**-based
 synthetic **fuel** briquets)

IT **Surfactants**
 (tall-oil pitch-based and **glyceride**-based chem. change agent
 for prodn. of solid **coal**-based synthetic **fuel**
 briquets)

IT Fats and Glyceridic oils, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (vegetable, emulsions; tall-oil pitch-based and **glyceride**
 -based chem. change agent for prodn. of solid **coal**-based
 synthetic **fuel** briquets)

L2 ANSWER 11 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 2003:434448 CAPLUS	
DN 139:8464	
TI Method of increasing flotation rate of hydrophobic particles	
IN Yoon, Roe-Hoan	
PA USA	
SO PCT Int. Appl., 30 pp. CODEN: PIXXD2	
DT Patent	
LA English	
IC ICM B03D001-014 ICS B03D001-016; B03D001-018; B03D001-02; B03D001-008	
CC 46-4 (Surface Active Agents and Detergents)	

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>WO 2003045566</u>	A1	20030605	<u>WO 2001-US47680</u>	20011125
W: AT, AU, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, HU, ID, IL, IN, IS, JP, KR, LT, LU, LV, MN, MX, NO, NZ, PL, PT, RU, SE, TJ, TR, UA, US, VN				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
<u>WO 2003039714</u>	A1	20030515	<u>WO 2002-US4815</u>	20020220
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
<u>US 2000-527186</u>	A	20000317		
<u>WO 2001-US47680</u>	A	20011107		

AB Methods of increasing the rate of sepg. hydrophobic and hydrophilic particles by flotation have been developed. They are based on using appropriate reagents to enhance the hydrophobicity of the particles to be floated, so that they can be more readily collected by the air bubbles

h eb c g cg b cg

eb

particles)
 IT 49718-23-2, Methylsilanediol homopolymer
 RL: MOA (Modifier or additive use); USES (Uses)
 (assumed monomers; method of increasing flotation rate of hydrophobic particles)
 IT 1309-56-4, Molybdenite 7782-42-5, Graphite, processes 14807-96-6,
 Talc, processes
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
 (hydrophobic particles; method of increasing flotation rate of hydrophobic particles)
 IT 9004-73-3, Polymethylhydrogensiloxane
 RL: MOA (Modifier or additive use); USES (Uses)
 (method of increasing flotation rate of hydrophobic particles)
 RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE
 (1) Brookes; US 4857221 A 1989 CAPLUS
 (2) Brookes; US 4859318 A 1989 CAPLUS
 (3) Keys; US 4589980 A 1986 CAPLUS
 (4) Keys; US 4678563 A 1987 CAPLUS
 (5) Mitzmager; US 3480143 A 1969
 (6) Versitech; WO 0009268 A1 2000 CAPLUS
 (7) Welch; US 5407080 A 1995 CAPLUS

L2 ANSWER 12 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 2003:301160 CAPLUS	
DN 138:323729	
TI Stable water -in-oil diesel fuel emulsions containing fatty esters and partial esters of alcohols and alkoxyated alcohols	
IN Oldfield, Andrew Simon; Thompson, Lee	
PA Imperial Chemical Industries PLC, UK	
SO PCT Int. Appl., 18 pp.	
CODEN: PIXXD2	
DT Patent	
LA English	
IC ICM C10L001-32	
CC 51-9 (Fossil Fuels, Derivatives, and Related Products)	

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003031540	A1	20030417	WO 2002-GB4254	20020919
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI GB 2001-24117 A 20011008

AB Stable **water**-in-oil diesel **fuel** emulsions contain emulsifiers consisting of polymeric nonionic **surfactants** selected from: (1) fatty acid esters or partial esters of polyhydric alcs., (2) alkoxyated fatty acid esters or partial esters of polyhydric alcs., and (3) alkoxyated primary alcs., such that the emulsifier has a hydrophile-lipophile balance (HLB) of >4. The emulsifiers, which are present at 0.1-4 wt.% (preferably 1-2.5 wt.%) concn., are prepd. from polyhydric alcs. with ≥3 hydroxyl groups (esp. glycerol or sorbitol) and C12-24-linear or branched, satd. or unsatd. fatty acids. The alkoxyated alcs. are prepd. from

C7-20-alcs. and have a d.p. ≤ 30 . In addn., the emulsions can contain C5-15-primary alcs. (preferably C6-12-alcs.) as emulsion couplers.

ST diesel **fuel** emulsion fatty ester emulsifier; alkoxyated alc ester emulsifier diesel **fuel**; alc emulsifier diesel **fuel**

IT Fatty acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(C12-24, esters, emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Fatty acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(C16-20, esters, emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(C5-15, emulsion couplers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(C6-12, emulsion couplers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(C7-20, alkoxyated, emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(C9-15, alkoxyated, emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Alcohols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(alkoxyated; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(alkyl group-terminated; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Emulsions
(diesel **fuel**; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Diesel **fuel** additives
(emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT **Glycerides**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(emulsifiers; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Diesel **fuel**
(emulsions; stable **water**-in-oil diesel **fuel** emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

IT Fatty acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(esters with alkoxyated alcs.; stable **water**-in-oil diesel

- fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)
- IT Fatty acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(esters with polyhydric alcs.; stable **water**-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)
- IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(mono(alkyl group)-terminated; stable **water**-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)
- IT Emulsifying agents
Surfactants
(nonionic; stable **water**-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)
- IT Hydrophile-lipophile balance value
(stable **water**-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)
- IT Polyesters, uses
RL: MOA (Modifier or additive use); USES (Uses)
(**surfactants**; stable **water**-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)
- IT 50-70-4D, Sorbitol, esters 56-81-5D, Glycerol, esters 57-11-4D, Stearic acid, esters 112-80-1D, Oleic acid, esters 132175-04-3, Hypermer A 60 512175-04-1, Hypermer A 70
RL: MOA (Modifier or additive use); USES (Uses)
(emulsifiers; stable **water**-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)
- IT 111-87-5, 1-Octanol, uses
RL: MOA (Modifier or additive use); USES (Uses)
(emulsion couplers; stable **water**-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)
- IT 1338-43-8, Span 80 9005-70-3, Tween 85 26266-58-0, Span 85
RL: MOA (Modifier or additive use); USES (Uses)
(**surfactants**; stable **water**-in-oil diesel fuel emulsions contg. fatty esters and partial esters of alcs. and alkoxyated alcs.)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Ambrosini, T; WO 0151593 A 2001 CAPLUS
- (2) Caterpillar Inc; WO 9963024 A 1999 CAPLUS
- (3) Eisenbeis, A; WO 0155282 A 2001
- (4) Ici Ltd; GB 2002400 A 1979 CAPLUS
- (5) Ici Plc; GB 2117398 A 1983 CAPLUS
- (6) Labofina Sa; GB 2066288 A 1981 CAPLUS

L2 ANSWER 13 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

	Full Text	Citing References
AN	2003:133382	CAPLUS
DN	138:190504	
TI	Biodegradable surfactant for invert emulsion drilling fluid	
IN	Patel, Arvind D.; Hoxha, Burnhan; Bell, Reginald J.	
PA	M-I L.L.C., USA	
SO	PCT Int. Appl., 34 pp. CODEN: PIXXD2	
DT	Patent	
LA	English	
IC	ICM C09K007-06	

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ICS C09K007-00

CC 51-2 (Fossil Fuels, Derivatives, and Related Products)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003014253	A1	20030220	WO 2002-US25353	20020809
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003114316	A1	20030619	US 2001-927619	20010810
PRAI	US 2001-927619	A	20010810		
AB	An invert emulsion drilling fluid includes an oleaginous continuous phase; a nonoleaginous discontinuous phase; a biodegradable surfactant including a di-fatty acid ester of triglycerol; and a weighting agent. It is preferred that the fatty acid have the formula RCO ₂ H in which R is an alkyl or alkenyl having 10 to 20 carbon atoms. The oleaginous fluid is selected from diesel oil, mineral oil, synthetic oil, ester oils, glycerides of fatty acids, aliph. esters, aliph. ethers, aliph. acetals, or other such hydrocarbons and combinations of these and similar compds. The nonoleaginous phase is selected from fresh water , sea water , brine, aq. solns. contg. water sol. org. salts, water sol. alcs. or water sol. glycols or combinations of these and similar compds. The weighting agent is any suitable weighting agent and is preferably selected from water insol. weighting agents such as barite, calcite, mullite, galena, manganese oxides, iron oxides, or combinations of these or water sol. weighting agents such as water sol. salts of zinc, iron, barium, calcium or combinations of these and similar compds.				
ST	biodegradable surfactant invert emulsion drilling fluid thermal brine stability; well treatment fluid biodegradable thixotropy polyglyceryl fatty acid diester				
IT	Paraffin oils				
	RL: TEM (Technical or engineered material use); USES (Uses) (Bio Base-300; biodegradable surfactant for invert emulsion drilling fluid)				
IT	Fatty acids, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (C10-20, diesters with diglycerol and triglycerol; biodegradable surfactant for invert emulsion drilling fluid)				
IT	Fatty acids, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (C10-20, unsatd., diesters with diglycerol and triglycerol; biodegradable surfactant for invert emulsion drilling fluid)				
IT	Acetals				
	Esters, uses				
	Ethers, uses				
	RL: TEM (Technical or engineered material use); USES (Uses) (aliph.; biodegradable surfactant for invert emulsion drilling fluid)				
IT	Diesel fuel				
	Drilling fluids				
	Seawater				
	(biodegradable surfactant for invert emulsion drilling fluid)				
IT	Tall oil				
	RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (biodegradable surfactant for invert emulsion drilling fluid)				
IT	Hydrocarbon oils				

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Lime (chemical)
 RL: TEM (Technical or engineered material use); USES (Uses)
 (biodegradable **surfactant** for invert emulsion drilling fluid)

IT **Surfactants**
 (biodegradable; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Thixotropic agents
 (effect of thermal aging and cement or brine on effectiveness of; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Stability
 (elec., of the inverted emulsion; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Brines
 (for aq. phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT **Glycerides**, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (for oil phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Drilling fluids
 (inverted emulsions; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Salts, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (org., **water-sol.**, for aq. phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Cement
 (portland, Class G; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Biodegradable materials
 (**surfactants**; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Esters, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (synthetic, for oil phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT Alcohols, uses
 Glycols, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**water-sol.**, for aq. phase; biodegradable **surfactant** for invert emulsion drilling fluid)

IT 67-48-1, Choline chloride 7447-40-7, Potassium chloride, uses 7647-14-5, Sodium chloride, uses 7786-30-3, Magnesium chloride, uses 10043-52-4, Calcium chloride, uses 28299-33-4, NOVAWET 67938-21-0, Diglyceryl diisostearate 130392-39-1, REV DUST 136753-47-4, VERSACOAT 136753-49-6, VERSAMOD 136753-51-0, VERSA SWA 167140-10-5, NOVAMUL 220880-98-8, Ecotrol 221902-96-1, VG Plus 370106-53-9, VERSAVERT F 498554-36-2, Nova Plus
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (biodegradable **surfactant** for invert emulsion drilling fluid)

IT 471-34-1, Calcium carbonate, uses 1305-62-0, Calcium hydroxide, uses 12001-31-9, Bentone 38 56090-54-1D, Triglycerol, C10-C20 alkyl or alkenyl di-fatty acid esters 59113-36-9D, Diglycerol, C10-C20 alkyl or alkenyl di-fatty acid esters 66082-42-6, Triglyceryl diisostearate 254995-18-1, Bentone 155 449211-85-2, MI Bar 498554-49-7, Amodril 1000
 RL: TEM (Technical or engineered material use); USES (Uses)
 (biodegradable **surfactant** for invert emulsion drilling fluid)

IT 498553-01-8, Emulpharma PG 20
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (emulsifier; biodegradable **surfactant** for invert emulsion drilling fluid)

IT 1302-93-8, Mullite 1332-37-2, Iron oxide, uses 7439-89-6D, Iron,

water-sol. salts 7440-39-3D, Barium, water-sol. salts
 7440-66-6D, Zinc, water-sol. salts 7440-70-2D, Calcium,
 water-sol. salts 11129-60-5, Manganese oxide 12179-39-4,
 Galena 13462-86-7, Barite

RL: MOA (Modifier or additive use); TEM (Technical or engineered material
 use); USES (Uses)

(weighting agent; biodegradable **surfactant** for invert
 emulsion drilling fluid)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Flider; US 5380469 A 1995 CAPLUS
- (2) Jakobson; US 5424469 A 1995 CAPLUS
- (3) Jakobson; US 5466719 A 1995 CAPLUS
- (4) Walker; US 4464269 A 1984 CAPLUS

L2 ANSWER 14 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
--------------	----------------------

AN 2002:888857 CAPLUS

DN 137:372374

TI Aromatics-free diesel **fuel** emulsions containing plant-derived glyceridic
 oils and fatty esters

IN Castiglioni, Antonio M.; Giupponi, Massimiliano; Lombardi, Alessandro

PA Exxonmobil Chemical Patents Inc., USA

SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C10L001-02

ICS C10L001-32

CC 51-9 (Fossil Fuels, Derivatives, and Related Products)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002092731	A1	20021121	WO 2002-EP4880	20020503

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
 TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
 CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI IT 2001-MI1002 A 20010516

AB Aroms.-free diesel **fuels** consist of a non-arom. hydrogenated hydrocarbon
 component (esp. paraffins, isoparaffins, and cycloparaffins) 100, a plant
 or animal oil (or derived fatty acid ester) 1-50, **water** 0-30, and

surfactants and stabilizers ≤ 4 vol. parts. The hydrocarbon
 component has a boiling range 140-230°, flammability point
 30-150°, and a distn. range boiling width of 5-50° (e.g., a
 narrow-boiling hydrogenated gas oil). Suitable plant oils are selected
 from rapeseed oil, sunflower oil, soybean oil, and palm oil, and their
 corresponding Me esters. Suitable stabilizers and **surfactants** include
 nonionic **surfactants** (preferably ethoxylated alcs.), ethoxylated (and/or
 propoxylated) polyols, sorbitan monooleate, ethylene glycol, and
 polyethylene glycol C16-18-alkyl ethers.

ST diesel **fuel** glyceridic oil emulsion; plant glyceridic oil methyl ester
 diesel **fuel** emulsion; gas oil glyceridic emulsion diesel **fuel**

IT Polyoxyalkylenes, uses

RL: NUU (Other use, unclassified); USES (Uses)

(C16-18-alkyl ethers, **surfactants**, for diesel **fuel**
 substitutes; aroms.-free diesel **fuel** emulsions contg.

plant-derived glyceridic oils and fatty esters)

IT **Glycerides**, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (animal, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Diesel **fuel** substitutes
 (aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Palm oil
 Rape oil
 Soybean oil
 Sunflower oil
 RL: TEM (Technical or engineered material use); USES (Uses)
 (diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Emulsions
 (diesel **fuel**, substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Diesel **fuel**
 (emulsions, substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Alcohols, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (ethoxylated, **surfactants**, for diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Gas oils
 (hydrocarbon component, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Alkanes, uses
 Cycloalkanes
 Isoalkanes
 RL: TEM (Technical or engineered material use); USES (Uses)
 (hydrocarbon component, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Fatty acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (palm-oil, Me esters, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Fatty acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (plant oils, Me esters, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT **Glycerides**, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (plant, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Alcohols, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (polyhydric, ethoxylated, propoxylated, **surfactants**, for diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Fatty acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (rape-oil, Me esters, diesel **fuel** substitutes; aroms.-free diesel **fuel** emulsions contg. plant-derived glyceridic oils and fatty esters)

IT Fatty acids, uses

RL: TEM (Technical or engineered material use); USES (Uses)
 (soya, Me esters, diesel **fuel** substitutes; aroms.-free diesel
fuel emulsions contg. plant-derived glyceridic oils and fatty
 esters)

IT Fatty acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (sunflower-oil, Me esters, diesel **fuel** substitutes;
 aroms.-free diesel **fuel** emulsions contg. plant-derived
 glyceridic oils and fatty esters)

IT 107-21-1, Ethylene glycol, uses 1338-43-8, Sorbitan monooleate
 RL: NUU (Other use, unclassified); USES (Uses)
 (stabilizer, diesel **fuel** substitutes; aroms.-free diesel
fuel emulsions contg. plant-derived glyceridic oils and fatty
 esters)

IT 25322-68-3D, POLYETHYLENE GLYCOL, C16-18-alkyl ethers
 RL: NUU (Other use, unclassified); USES (Uses)
 (**surfactants**, for diesel **fuel** substitutes;
 aroms.-free diesel **fuel** emulsions contg. plant-derived
 glyceridic oils and fatty esters)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Caterpillar Inc; WO 9963026 A 1999 CAPLUS
 (2) Johnson, L; US 5520708 A 1996 CAPLUS
 (3) Yakobson, D; US 5506272 A 1996 CAPLUS

L2 ANSWER 15 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 2002:833049 CAPLUS	
DN 137:339766	
TI Recycling of water contaminated oil based drilling fluids	
IN Mueller, Frank Manfred Franz; Rudolph, Juergen	
PA M-I L.L.C., USA	
SO PCT Int. Appl., 15 pp.	
CODEN: PIXXD2	
DT Patent	
LA English	
IC ICM E21B021-06	
ICS B01D017-04; C10G033-04	
CC 51-2 (Fossil Fuels, Derivatives, and Related Products)	
Section cross-reference(s): 46	

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002086280	A1	20021031	WO 2002-US13171	20020424
W:				
AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,				
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,				
UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW:				
GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,				
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,				
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2003100452	A1	20030529	US 2002-132377	20020424
PRAI US 2001-286236P	P	20010424		
OS MARPAT 137:339766				
AB An invert emulsion based drilling fluid consisting of an oil component and an aq. component is recycled by mixing the invert emulsion with a emulsion clearing agent which is a mixt. of an anionic and a non-ionic tenside and sepg. the excess water from the residual invert drilling fluid. The anionic tenside is an alkyl sulfate with the general formula R1-O-SO3X with R1 being a linear or branched C1-22 alkyl group and X an alkali or ammonium ion, an alkyl sulfonate with the general formula R2-SO3Y with R2				

being a C1-30 alkyl group and Y an alkali or ammonium ion, or an alkyl aryl sulfonate with the general formula R4-A-SO3Y with R4 being a C1-22 alkyl group, A is an aryl group, and Y is an alkali or ammonium ion. The non-ionic tenside can be an alkyl polyglycoside with the general formula R7-O-Gn where R7 is a linear or branched, satd. or unsatd. C1-22 alkyl group, G is a glucose unit, and n is an integer of 1-10, or it can be a tenside with the general formula R5-O-(EO)nH or R5-O-(EO)mR5 where R5 is a linear or branched, satd. or unsatd. C1-22 alkyl group, n is 1-5, m is 1-50 and EO can be an ethylene oxide, propylene oxide, or butylene oxide group. The **water** is sepd. in a settling tank or in a cyclone separator. The emulsion contains a weighting material, such as barite, calcite, mullite, gallena, manganese oxides, or iron oxides. The oil component of the drilling fluid can be diesel oil, mineral oil, synthetic oil, C10-19 alkyl and alkylene hydrocarbons, ester oils, **glycerides** of fatty acids, aliph. esters, aliph. ethers, or aliph. acetals.

ST drilling fluid inverted emulsion recycling **water** sepn **surfactant**

IT Acetals

Esters, uses

Ethers, uses

RL: NUU (Other use, unclassified); USES (Uses)

(aliph.; recycling of **water** contaminated oil based drilling fluids)

IT Sulfonic acids, uses

RL: NUU (Other use, unclassified); USES (Uses)

(alkanesulfonic, salts, C1-30, anionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT Sulfates, uses

RL: NUU (Other use, unclassified); USES (Uses)

(alkyl, anionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT Glycosides

RL: NUU (Other use, unclassified); USES (Uses)

(alkyl, nonionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT Sulfonic acids, uses

RL: NUU (Other use, unclassified); USES (Uses)

(alkylarene, salts, anionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT **Surfactants**

(anionic; recycling of **water** contaminated oil based drilling fluids)

IT Drilling fluids

(inverted emulsions; recycling of **water** contaminated oil based drilling fluids)

IT Polyethers, uses

RL: NUU (Other use, unclassified); USES (Uses)

(nonionic **surfactant**; recycling of **water** contaminated oil based drilling fluids)

IT **Surfactants**

(nonionic; recycling of **water** contaminated oil based drilling fluids)

IT Cyclone separators

Diesel **fuel**

(recycling of **water** contaminated oil based drilling fluids)

IT **Glycerides**, uses

Hydrocarbon oils

RL: NUU (Other use, unclassified); USES (Uses)

(recycling of **water** contaminated oil based drilling fluids)

IT 7732-18-5, Water, processes

RL: REM (Removal or disposal); PROC (Process)

(recycling of **water** contaminated oil based drilling fluids)

IT 1302-93-8, Mullite 1332-37-2, Iron oxide, uses 11129-60-5, Manganese oxide 13397-26-7, Calcite, uses 13462-86-7, Barite

RL: NUU (Other use, unclassified); USES (Uses)

(weighting material; recycling of **water** contaminated oil based drilling fluids)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

- (1) Chevron Usa Inc; WO 9635040 A 1996 CAPLUS
- (2) Park, G; US 5195847 A 1993 CAPLUS
- (3) Quintero, L; US 6267716 B1 2001 CAPLUS
- (4) Shupe, R; US 4269271 A 1981 CAPLUS

L2 ANSWER 16 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Citing
Text References

AN 2002:596759 CAPLUS

DN 137:127401

TI Method for fluidifying a tar or sludge contained in storage tanks to facilitate removal and disposal

IN Mercier, Jean Michel; Maurice, Jean Charles

PA Rhodia Eco Services, Fr.

SO Fr. Demande, 16 pp.

CODEN: FRXXBL

DT Patent

LA French

IC ICM C10L010-04

ICS C10L001-32; C11D001-66; B01F017-00; B01F003-12; B08B009-08

CC 51-10 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 46, 60

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2815639	A1	20020426	FR 2000-14129	20001019
PRAI	FR 2000-14129		20001019		

AB The inventions contains a method for fluidifying a tar or a sludge, in which one places in contact a tar or the sludge, in order to form an aq. emulsion, with a solvent: 0.5-50 parts, a surface active agent: 0.1 - 20 parts, **water**: 2-40 parts, and a dispersant: 0.03-10 part based on 100 parts of tar or sludge. Low temps., from room temp. to 40° are used for the emulsification. This method is esp. applicable to cleaning tanks or cisterns contg. the waste tar or sludges resulting from org. or petrochem. operations; the aq. emulsion obtained from this invention to later be destroyed, possibly by incineration. The invention equally applies to a formulation to fluidifying a tar or a sludge into a temp.-stable emulsion.

ST emulsification tar sludge residue nonionic **surfactant** anionic dispersant solvent; tank cistern cleaning waste sludge emulsion removal ethoxylated **surfactant**

IT Hydrocarbons, uses

RL: NUU (Other use, unclassified); USES (Uses)

(alicyclic, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Alcohols, uses

Cycloalkanols

RL: NUU (Other use, unclassified); USES (Uses)

(aliph., solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Alcohols, uses

RL: MOA (Modifier or additive use); USES (Uses)

(alkoxy, hydrogen sulfate, alkali metal salts; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Glycosides

RL: MOA (Modifier or additive use); USES (Uses)

(alkyl polyglycosides; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Phenols, uses

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RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
 (alkyl, ethoxylated, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Glycosides
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkyl; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Phenols, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (alkyl; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Sulfonic acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkylarene, salts, alkali metal salts; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Dispersing agents
 (anionic, ~~water~~-sol.; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Sulfonic acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (arenesulfonic, naphthalene-derived, alkali metal salts; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Tanks (containers)
 (cleaning of; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Tar acids
 RL: NUU (Other use, unclassified); USES (Uses)
 (cresylic, derivs., solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Tar acids
 RL: NUU (Other use, unclassified); USES (Uses)
 (cresylic, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Esters, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (diesters, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
 (ethers, phenyl- and alkylphenyl terminated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (ethers, phosphono- terminated, alkali metal salts; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Castor oil
 Fatty acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (ethoxylated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (fatty amido group-terminated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Amides, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (fatty, alkoxyated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Alcohols, uses

Amines, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (fatty, ethoxylated; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Petroleum products
 (fractions, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Phenols, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (halo, solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Sludges
 (in tanks or cisterns; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Emulsification
Surfactants
 Thermal stability
 (method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Aromatic hydrocarbons, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Coal tar
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); REM (Removal or disposal); PROC (Process)
 (method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Emulsions
 (microemulsions, oil-in-water; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT **Surfactants**
 (nonionic; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Sludges
 (petroleum refining residues; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Petroleum refining residues
 (sludges; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Amines, uses
 Esters, uses
 Ethers, uses
 Hydrocarbons, uses
 Ketones, uses
 Nitriles, uses
 Phenols, uses
 Thiols (organic), uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Solubility
 (soly. parameter, δH , 0-14 $\sqrt{(J/m^3)}$; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT **Glycerides**, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (sucrose derivs.; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT Carbohydrates, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (sugar esters; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT 1321-69-3D, Naphthalenesulfonic acid, sodium salt, condensate, polymers

RL: MOA (Modifier or additive use); USES (Uses)
 (Supragil RM 210 E1; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal for cleaning tanks and cisterns)

IT 9016-45-9, Ethoxylated nonylphenol
 RL: MOA (Modifier or additive use); USES (Uses)
 (d.p. 9; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT 443891-28-9, Supragil RM 210E1
 RL: MOA (Modifier or additive use); USES (Uses)
 (dispersant; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal for cleaning tanks and cisterns)

IT 57-50-1D, Sucrose, esters 57-50-1D, Sucrose, **glyceride** derivs.
98-11-3D, Benzenesulfonic acid, alkyl derivs., alkali metal salts
5138-18-1D, Sulfosuccinic acid, dialkyl esters, alkali metal salts
7664-38-2D, Phosphoric acid, alkyl esters, alkali metal salts
7664-93-9D, Sulfuric acid, alkoxylalkyl esters, alkali metal salts
7664-93-9D, Sulfuric acid, alkyl derivs., alkali metal salts 7664-93-9D,
 Sulfuric acid, alkylaryl esters, alkali metal salts 8062-15-5D,
 Lignosulfonate, alkali metal salts 9005-63-4D, Ethoxylated sorbitan,
 esters 12441-09-7D, Sorbitan, esters 25155-19-5D, NaphthaleneSulfonic
 acid, alkyl derivs., alkali metal salts 106392-12-5, Ethylene
 oxide-propylene oxide block copolymer
 RL: MOA (Modifier or additive use); USES (Uses)
 (method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT 7732-18-5, **Water**, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

IT 91-20-3, Naphthalene, uses 91-20-3D, Naphthalene, derivs.
 RL: NUU (Other use, unclassified); USES (Uses)
 (solvent; method for fluidifying tar or sludge contained in storage tanks to facilitate removal and disposal)

L2 ANSWER 17 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2002:256098 CAPLUS
 DN 136:283793
 TI Methods of enhancing fine particle dewatering
 IN Roe-Hoan, Yoon
 PA USA
 SO PCT Int. Appl., 53 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM B01D037-02
 CC 60-3 (Waste Treatment and Disposal)
 Section cross-reference(s): 54

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
<u>WO 2002026350</u>	A1	20020404	<u>WO 2000-US27082</u>	20000928
W: AT, AU, BR, CA, CN, CZ, DE, FI, GB, HU, ID, KP, KR, LT, MN, MX, NO, NZ, PL, RO, RU, SE, SK, TM, TR, UA, UZ, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
<u>AU 2000077457</u>	A5	20020408	<u>AU 2000-77457</u>	20000928
<u>EP 1333905</u>	A1	20030813	<u>EP 2000-967227</u>	20000928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				

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PRAI WO 2000-US27082 A 20000928

AB A new method of improving the process of dewatering fine particle materials is disclosed. In this method, an aq. slurry of fine particles is treated with appropriate hydrophobizing reagents so that the particulate material becomes moderately hydrophobic with its **water** contact angle considerably below 90°. A low hydrophile-lipophile balance (HLB) no. **surfactant** is then added to the slurry, so that the **surfactant** mols. adsorb on the moderately hydrophobic surface primarily by hydrophobic attraction and, thereby, increase its contact angle close to or above 90°. By virtue of the greatly enhanced hydrophobicity, the **water** mols. adhering to the surface are destabilized and removed more readily by a mech. dewatering process. Any nonionic **surfactant** with its HLB no. below ~15 may be used for the hydrophobicity enhancement. The **surfactants** may be used in conjunction with appropriate solvents such as light hydrocarbon oils and short-chain alcs. The moisture redn. can be further improved by using appropriate electrolytes in conjunction with the low HLB **surfactants**, spraying surface tension lowering reagents onto the filter cake, subjecting the cake to a suitable vibratory means, and by using combinations thereof.

ST particle dewatering **surfactant**

IT Fats and Glyceridic oils, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (animal; methods of enhancing fine particle dewatering)

IT **Surfactants**
 (cationic; methods of enhancing fine particle dewatering)

IT Drying
 (dewatering; methods of enhancing fine particle dewatering)

IT Fatty acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (esters, ethoxylated; methods of enhancing fine particle dewatering)

IT Amines, uses
 Fatty acids, uses
Glycerides, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (ethoxylated; methods of enhancing fine particle dewatering)

IT Fats and Glyceridic oils, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (fish; methods of enhancing fine particle dewatering)

IT Ashes (residues)
 (fly; methods of enhancing fine particle dewatering)

IT Polymers, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (hydrophobic; methods of enhancing fine particle dewatering)

IT Alcohols, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (linear, ethoxylated; methods of enhancing fine particle dewatering)

IT **Surfactants**
 (low HLB; methods of enhancing fine particle dewatering)

IT Biological materials
 Diesel **fuel**
Fuel oil
 Particles
 (methods of enhancing fine particle dewatering)

IT **Coal**, processes
 Kaolin, processes
 Metals, processes
 Minerals, processes
 Plastics, processes
 Sulfide minerals
 Zinc ores, processes
 RL: CPS (Chemical process); EPR (Engineering process); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
 (methods of enhancing fine particle dewatering)

IT Gasoline

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Kerosene
 RL: NUU (Other use, unclassified); USES (Uses)
 (methods of enhancing fine particle dewatering)

IT Amides, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (methods of enhancing fine particle dewatering)

IT Ethers, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (methods of enhancing fine particle dewatering)

IT Fatty acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (methods of enhancing fine particle dewatering)

IT Hydrocarbon oils
 RL: TEM (Technical or engineered material use); USES (Uses)
 (methods of enhancing fine particle dewatering)

IT Thiols (organic), uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (methods of enhancing fine particle dewatering)

IT **Surfactants**
 (nonionic; methods of enhancing fine particle dewatering)

IT Fats and Glyceridic oils, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (vegetable, ethoxylated; methods of enhancing fine particle dewatering)

IT 7631-86-9, Silica, processes 12169-28-7, Sphalerite
 RL: CPS (Chemical process); EPR (Engineering process); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)
 (methods of enhancing fine particle dewatering)

IT 71-36-3, Butanol, uses 1338-43-8, Span 80 9005-65-6, Tween 80
 RL: NUU (Other use, unclassified); USES (Uses)
 (methods of enhancing fine particle dewatering)

IT 50-99-7D, Glucose, esters 56-81-5D, Glycerol, esters 57-50-1, Sucrose, uses 107-21-1D, 1,2-Ethandiol, derivs. 107-97-1D, Sarcosine, derivs. 108-11-2, Methylisobutyl carbinol 7664-38-2D, Phosphoric acid, esters 9004-73-3, Polymethylhydrosiloxane 12441-09-7D, Sorbitan, derivs.
 RL: TEM (Technical or engineered material use); USES (Uses)
 (methods of enhancing fine particle dewatering)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Falcon-Steward; US 4278208 A 1981
- (2) Kenney; US 5346630 A 1994
- (3) Muralidhara; US 4561953 A 1985 CAPLUS
- (4) Wang; US 4207186 A 1980 CAPLUS
- (5) Wang; US 4210531 A 1980 CAPLUS
- (6) Yoon; US 5670056 A 1997 CAPLUS
- (7) Yoon; US 5814210 A 1998

L2 ANSWER 18 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN	2000:731673 CAPLUS
DN	133:311174
TI	Cleaning compositions for fabrics useful for aerosol carpet cleaners
IN	Ochomogo, Maria G.
PA	Clorox Co., USA
SO	Jpn. Kokai Tokkyo Koho, 9 pp. CODEN: JKXXAF
DT	Patent
LA	Japanese
IC	ICM C11D010-02 ICS C11D001-12; C11D003-20; C11D003-43; C11D003-48; C11D003-50; C11D017-00; D06B001-02
CC	46-6 (Surface Active Agents and Detergents)
FAN.CNT	1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI JP 2000290696 A2 20001017 JP 1999-101921 19990409
 PRAI JP 1999-101921 19990409
 AB Title compns. comprise (a) 0.1-6% foaming **surfactants**, (b) 0.5-5% nonvolatile hydrophobic org. solvents with **water** soly. at 25° <18%, (c) effective amts. of emulsifiers, (d) effective amts. of propellants, and (e) **water**, where the **surfactants** and solvents interact with the propellants by mixing to form initial foams, which collapse without abrasion into fabric surfaces, upon dispensing and the emulsifiers emulsify the solvents after the foam collapse. Thus a compn. comprised Na lauryl sulfate 2.5, Na laurylsarcosinate 3.5, dipropylene glycol Pr ether 3.0, polyethylene glycol monooleate 0.3, 85:15 isobutane-propane propellant 5.0, volatile amine/sodium benzoate corrosion inhibitor 0.35, fragrance 0.5, Borox 0.75, styrene-maleic anhydride copolymer 3.0, and **water** to 100%.
 ST aerosol carpet cleaner compn
 IT Aromatic compounds
 RL: TEM (Technical or engineered material use); USES (Uses)
 (C10-12, solvents; cleaning compns. useful for aerosol carpet cleaners)
 IT Cleaning
 (app.; cleaning compns. useful for aerosol carpet cleaners)
 IT Aerosols
 Carpets
 Detergents
 Emulsifying agents
 Propellants (**fuels**)
 (cleaning compns. useful for aerosol carpet cleaners)
 IT Petroleum products
 (distillates, solvents; cleaning compns. useful for aerosol carpet cleaners)
 IT **Glycerides**, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (emulsifiers; cleaning compns. useful for aerosol carpet cleaners)
 IT Polyamide fibers, miscellaneous
 RL: MSC (Miscellaneous)
 (fabrics, carpets; cleaning compns. useful for aerosol carpet cleaners)
 IT **Surfactants**
 (foaming; cleaning compns. useful for aerosol carpet cleaners)
 IT 106-12-7 9004-96-0, Polyethylene glycol monooleate 25618-55-7D, Polyglycerol, fatty acid esters 37220-82-9, Glycerin oleate
 RL: TEM (Technical or engineered material use); USES (Uses)
 (emulsifier; cleaning compns. useful for aerosol carpet cleaners)
 IT 74-98-6, Propane, uses 75-28-5, Isobutane
 RL: TEM (Technical or engineered material use); USES (Uses)
 (propellant; cleaning compns. useful for aerosol carpet cleaners)
 IT 112-25-4, Ethylene glycol monohexyl ether 29911-27-1, Dipropylene glycol propyl ether 132739-31-2, Dipropylene glycol mono-tert-butyl ether
 RL: TEM (Technical or engineered material use); USES (Uses)
 (solvent; cleaning compns. useful for aerosol carpet cleaners)
 IT 151-21-3, Sodium lauryl sulfate, uses 3097-08-3, Magnesium lauryl sulfate 7631-98-3, Sodium N-laurylsarcosinate 14933-03-0D, Disodium sulfosuccinate, lauramide derivs.
 RL: TEM (Technical or engineered material use); USES (Uses)
 (**surfactant**; cleaning compns. useful for aerosol carpet cleaners)

L2 ANSWER 19 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1998:561335 CAPLUS
 DN 129:190773
 TI Alkyl aromatic solvent-based cleaning formulation
 IN Wilson, Paul A.
 PA Product Source International, Inc., Can.

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SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C11D003-16

ICS C11D003-18; C11D003-43; C11D001-75; C11D001-22; C11D001-34;
C11D003-20; C11D001-72; C11D001-825; C11D001-83; C11D017-00;
C11D003-30; A01N025-02; C11D007-50; C09G001-08; C10M105-06

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 857778	A2	19980812	EP 1998-300158	19980109
	EP 857778	A3	19981028		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 6239097	B1	20010529	US 1997-781221	19970110
	ZA 9800185	A	19990708	ZA 1998-185	19980109
	CA 2226767	AA	19980710	CA 1998-2226767	19980113
PRAI	US 1997-781221	A	19970110		
AB	The compn., having excellent balance between solvency, flash point and odor, comprises an alkylated arom. solvent 40-90, a surfactant (Surfonic N 95) 3-16, water 0-57 and Ammonyx LO 0-6% by wt. Thus, an arom solvent was prepd. by reacting of 1-pentene and toluene in the presence of anhyd. hydrogen fluoride and purifying to give 99% a monoalkylated toluene.				
ST	surfactant monoalkylated toluene cleaning solvent; alkylation arom hydrocarbon cleaning solvent; pentene toluene alkylation solvent				
IT	Alkylation Detergents Propellants (fuels) Surfactants (alkyl arom. solvent-based cleaning formulation)				
IT	Glycerides , uses Lanolin Waxes RL: MOA (Modifier or additive use); USES (Uses) (alkyl arom. solvent-based cleaning formulation)				
IT	Aromatic hydrocarbons, uses RL: TEM (Technical or engineered material use); USES (Uses) (alkyl; alkyl arom. solvent-based cleaning formulation)				
IT	Beeswax RL: MOA (Modifier or additive use); USES (Uses) (synthetic, Sasolv 250; alkyl arom. solvent-based cleaning formulation)				
IT	57-11-4, Octadecanoic acid, uses 102-71-6, uses 1317-33-5, Molybdenum sulfide (MoS2), uses 1643-20-5, Ammonyx LO 2921-88-2, Chlorpyrifos 7439-98-7D, Molybdenum, resins, uses 9005-65-6, Polysorbate 80 27176-87-0, Dodecylbenzenesulfonic acid 37318-79-9, Sorbitan oleate 211629-37-7, Armal 22 211629-38-8, Armal 33 211629-43-5, Desophos RL: MOA (Modifier or additive use); USES (Uses) (alkyl arom. solvent-based cleaning formulation)				
IT	137-16-6, Hamposyl L 30 9016-45-9, Surfonic N 40 RL: TEM (Technical or engineered material use); USES (Uses) (alkyl arom. solvent-based cleaning formulation)				
IT	108-88-3, reactions 109-67-1, 1-Pentene RL: RCT (Reactant); RACT (Reactant or reagent) (alkylation reaction of; alkyl arom. solvent-based cleaning formulation)				
IT	71-43-2, Benzene, uses 1330-20-7, Xylene, uses RL: TEM (Technical or engineered material use); USES (Uses) (alkylation reaction of; alkyl arom. solvent-based cleaning formulation)				
IT	80763-10-6, Propylene glycol-tert-butyl ether RL: MOA (Modifier or additive use); USES (Uses) (emulsifier; alkyl arom. solvent-based cleaning formulation)				

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IT 124-38-9, Carbon dioxide, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (propellant; alkyl arom. solvent-based cleaning formulation)

L2 ANSWER 20 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

	Full Text	Citing References
AN	1984:574468	CAPLUS
DN	101:174468	
TI	Emulsified fuels of viscous oils	
PA	Toyo Rubber Industry Co., Ltd., Japan; Kawasaki Heavy Industries, Ltd.	
SO	Jpn. Tokkyo Koho, 7 pp.	
	CODEN: JAXXAD	
DT	Patent	
LA	Japanese	
IC	F23C011-00; F23D011-06; C10L001-32	
CC	51-12 (Fossil Fuels, Derivatives, and Related Products)	

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	<u>JP 59025121</u>	B4	19840614	<u>JP 1973-28286</u>	19730310
PRAI	<u>JP 1973-28286</u>		19730310		
AB	Emulsified fuels contg. viscous oil 20-80, water 20-80, and surfactant 0.001-5 wt.%, are stable at <100°, have low viscosity, emit low levels of NOx upon combustion, and achieve nearly complete combustion without soot generation. Thus, 200 parts aq. polyoxyethylene nonylphenyl ether sulfate Na salt [9014-90-8] (3 wt.% soln.) at 60-80° was mixed with 200 parts asphalt (specific penetration 80-100) at 100-120° and stirring at 3000 rpm. The emulsion had viscosity 4000 cP at 30° and the droplet diam. of dispersed phase was ~6 µ. The combustion of the sprayed fuel at excess air ratio 1.1-1.3:1 did not generate soot; the concn. of NOx in the flue gas was 220-250 ppm.				
ST	fuel emulsion viscous oil; combustion fuel emulsion; surfactant fuel emulsion; nitrogen oxide fuel emulsion combustion; soot fuel emulsion combustion				
IT	Glycerides , uses and miscellaneous RL: USES (Uses) (dispersants, for fuel emulsions)				
IT	Pitch Asphalt Paraffin oils Waxes and Waxy substances RL: USES (Uses) (emulsions contg., as low-viscosity fuels , manuf. and combustion of)				
IT	Combustion (of emulsified fuels)				
IT	Tar RL: USES (Uses) (coal, emulsions contg., as low-viscosity fuels , manuf. and combustion of)				
IT	Petroleum products (heavy oils, emulsified fuels contg., manuf. and combustion of)				
IT	<u>67-56-1</u> , uses and miscellaneous <u>107-21-1</u> , uses and miscellaneous <u>9002-89-5</u> <u>9005-38-3</u> <u>9014-90-8</u> <u>9016-45-9</u> RL: USES (Uses) (dispersants, for fuel emulsions)				
IT	<u>11104-93-1</u> , uses and miscellaneous RL: RCT (Reactant); RACT (Reactant or reagent) (in flue gases, from combustion of emulsified fuels , redn. of)				

L2 ANSWER 21 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1981:572439 CAPLUS
 DN 95:172439
 TI **Water**-in-hydrocarbon emulsions
 PA Unilever N. V., Neth.
 SO Neth. Appl., 17 pp.
 CODEN: NAXXAN
 DT Patent
 LA Dutch
 IC C10L001-32; B01F017-00
 CC 51-9 (Fossil Fuels, Derivatives, and Related Products)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 7903961	A	19801125	NL 1979-3961	19790521
	US 4395266	A	19830726	US 1980-150827	19800519
	EP 21471	A1	19810107	EP 1980-200472	19800520
	EP 21471	B1	19820324		

R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE

	AT 779	E	19820415	AT 1980-200472	19800520
	CA 1130695	A1	19820831	CA 1980-352238	19800520
	JP 56036591	A2	19810409	JP 1980-67695	19800521
	JP 58058392	B4	19831224		
PRAI	NL 1979-3961		19790521		
	EP 1980-200472		19800520		

AB Heating was used to dissolve 0.3% of rape oil fatty acid diamide of ethylenediamine (stabilizer) and 0.3% of diammonium soap of rape oil fatty acid or of safflower oil monoglyceride **surfactant** in petroleum distillate (40-135°). Then 9 parts of the distillate was emulsified with 1 part of H2O. The emulsion remained stable for 24 h, but not when the stabilizer or the **surfactant** was used alone. The emulsions were used as **fuels**.

ST gasoline emulsion **surfactant** stabilizer; diesel **fuel** emulsion **surfactant** stabilizer; hydrocarbon oil emulsion **surfactant** stabilizer; amide stabilizer **fuel** emulsion; soap stabilizer **fuel** emulsion; **glyceride** stabilizer **fuel** emulsion

IT **Fuels****Fuels**, diesel(detergents and stabilizers for **water** emulsion base, ethylenediammonium fatty acids derivs. and safflower-oil monoglycerides as)IT **Fuel** oil additives

Gasoline additives

(detergent-stabilizers, **water** emulsions, ethylenediammonium fatty acid **glycerides** and safflower-oil monoglycerides)

IT Amides, uses and miscellaneous

RL: USES (Uses)

(di-, fatty, stabilizers, for oil-**water fuel** emulsions)IT **Glycerides**, uses and miscellaneous

RL: USES (Uses)

(safflower-oil mono-, detergents, for oil-**water** emulsion **fuels**)

IT 107-15-3D, fatty acid salts

RL: USES (Uses)

(stabilizers, for oil-**water fuel** emulsions)

L2 ANSWER 22 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1980:498316 CAPLUS
 DN 93:98316

h eb c g cg b cg

eb

TI Stabilized compositions for oil-water mixtures
 PA Farsan Enterprises Ltd., UK
 SO Belg., 13 pp.
 CODEN: BEXXAL
 DT Patent
 LA French
 IC B01F; C10L
 CC 51-9 (Fossil Fuels, Derivatives, and Related Products)
 Section cross-reference(s): 46

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	BE 880069	A1	19800317	BE 1979-198133	19791116
	IL 58705	A1	19820228	IL 1979-58705	19791113
	BR 7907449	A	19800923	BR 1979-7449	19791114
	AU 7952832	A1	19800522	AU 1979-52832	19791115
	NL 7908387	A	19800520	NL 1979-8387	19791116
	DE 2946277	A1	19800604	DE 1979-2946277	19791116
	FR 2441656	A1	19800613	FR 1979-28319	19791116
	JP 55108493	A2	19800820	JP 1979-148742	19791116
	ZA 7906185	A	19801126	ZA 1979-6185	19791116
	CA 1114596	A1	19811222	CA 1979-340064	19791116
	PL 125046	B1	19830331	PL 1979-219669	19791116
	SU 1230470	A3	19860507	SU 1979-2847819	19791116
	GB 2039459	A	19800813	GB 1979-39934	19791119
	GB 2039459	B2	19830413		
	US 4266943	A	19810512	US 1979-95408	19791119
PRAI	GB 1978-45082		19781117		

AB An oil-sol. Mg salt (e.g., a naphthenate; 4.5-9.2%) and an anionic surfactant (e.g., a sulfonate; 1.4-3.0%) are dissolved in a light paraffin oil, the soln. being added to a mixt. of 4-9% ferrocene [102-54-5] in oil with 0-12% BzOH [65-85-0] and a combustible emulsifier, e.g., a mono-, di-, or triglyceride of a C12-20 acid. The combination forms a stabilizing mixt. which is added simultaneously with water to fuel oil at ~30° with vigorous stirring. The process is intended for emulsification of oil and water for use as fuel.

ST fuel oil emulsion stabilizer; magnesium naphthenate fuel emulsion; sulfonate naphthenate fuel emulsion; ferrocene fuel emulsion stabilizer; benzoate fuel emulsion stabilizer; glyceride fuel emulsion stabilizer; fat fuel emulsion stabilizer

IT Fuel oil
 (aq. emulsions, stabilization of)

IT Glycerides, uses and miscellaneous
 RL: USES (Uses)
 (emulsifying agents, for fuel oils and water, stabilizing agents in combination with)

IT Fuels
 (emulsions, stabilizing agents for, compn. and manuf. of)

IT Stabilizing agents
 (for aq. fuel-oil emulsions, compn. and manuf. of)

IT Naphthenic acids, compounds
 RL: USES (Uses)
 (magnesium salts, stabilizing agents contg., for aq. fuel-oil emulsions)

IT Surfactants
 (sulfonates, stabilizing agents contg. for aq. fuel-oil emulsions)

IT Fuel oil additives
 (stabilizers, for aq. emulsions, compn. and manuf. of)

IT 65-85-0, uses and miscellaneous 102-54-5 7439-95-4D, salts with naphthenic acids
 RL: USES (Uses)
 (stabilizing agents contg., for aq. fuel-oil emulsions)

L2 ANSWER 23 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1977:587062 CAPLUS
 DN 87:187062
 TI Novel microemulsions
 IN Piotrowski, Alfred B.
 PA Mobil Oil Corp., USA
 SO U.S., 2 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC C10L001-32
 NCL 044051000
 CC 51-6 (Fossil Fuels, Derivatives, and Related Products)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4046519	A	19770906	US 1975-627725	19751031
PRAI	US 1975-627725		19751031		
AB	Microemulsions of gasoline, MeOH [67-56-1], and H ₂ O, useful as motor fuels , are prep'd. with blends of surfactants having HLB value 3-4.5. Thus, to 94 mL gasoline is added ~1 g blend, HLB value 4, of 9 parts oleic acid monoglyceride [25496-72-4] and diglyceride [25637-84-7] and 1 part N,N-bis(2-hydroxyethyl)stearylamine oxide [14048-77-2]. Adding 5 mL MeOH and, in a blender, 1 mL H ₂ O gives a homogeneous clear dispersion which remains clear at room temp.				
ST	gasoline emulsion motor fuel ; methanol gasoline emulsion fuel ; emulsifier gasoline methanol water ; glyceride oleic acid emulsifier; amine oxide emulsifier				
IT	Gasoline				
	RL: USES (Uses) (microemulsions with methanol and water , for fuels , emulsifiers for)				
IT	Emulsifying agents (oleic acid glycerides and amine oxides, for gasoline-methanol- water microemulsions for fuels)				
IT	14048-77-2	25496-72-4	25637-84-7		
	RL: USES (Uses) (emulsifiers, for gasoline-methanol- water microemulsion fuels)				
IT	7732-18-5, uses and miscellaneous				
	RL: USES (Uses) (microemulsions with gasoline and methanol, for fuels , emulsifiers for)				
IT	67-56-1, uses and miscellaneous				
	RL: USES (Uses) (microemulsions with gasoline and water , for fuels , emulsifiers for)				

L2 ANSWER 24 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 1972:16295 CAPLUS
 DN 76:16295
 TI Hydrocarbon oil-containing gelled aqueous inorganic oxidizer salt explosives having improved stability to syneresis
 IN Young, Herbert L.
 PA Hercules Inc.
 SO U.S., 6 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC C06B

h eb c g cg b cg

eb

NCL 149041000
 CC 50 (Propellants and Explosives)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3617406	A	19711102	US 1969-843805	19690722
PRAI	US 1969-843805		19690722		
AB	<p>Manuf. is described of gelled inorg.-oxidizer salt explosives of the aq. slurry type contg. an oil as fuel and having improved syneresis stability. The hydrocarbon oil is mixed as an oil-in-H₂O emulsion maintained by ≥1 nonionic acyclic-type emulsifying agent, e.g. poly(oxyethylene) esters, poly(oxyethylene) alcs., and poly(oxyethylene) ethers, having a hydrophile-lipophile balance (HLB) of 15-20. This slurry contains crosslinkable galactomannan gum as a gelation agent and a crosslinking agent therefor in a wt. ratio of 30-70:1 comprising 1-3 wt. % of the finished explosive. K4Sb2O7 is a preferred crosslinking agent. Preferred galactomannan gums are guar and locust bean gums. This surfactant is dissolved in 25/50% of the water to be used and oil is added with stirring and then emulsified by passing through a homogenizer. NH₄NO₃ plus a small proportion of NH₄ sulfamate (aeration accelerator) and most of the rest of the water are added. Fumaric acid is added to adjust the pH to 2.5-4. Dry guar gum is dispersed in dry NaNO₃ and K4Sb2O7 and NaNO₂ are dispersed in the remaining water. The NaNO₃-guar gum and the NH₄NO₃-H₂O-NH₄ sulfamate mixt. are mixed at 80-90°F. The fuel-H₂O emulsion is added with agitation. The K4P2O7-NaNO₂ mixt. is added with agitation for 10-15 min. The final slurry mixt., due to initial hydration of the guar gum, is stable to settling of the ingredients while standing, but is still readily pumpable, during which it can be pumped for completion of crosslinking to form a gelled compn. contg. the fuel oil uniformly dispersed as droplets of ≤25 μ and stable to syneresis over prolonged periods. After ~1 hr, the crosslinking is complete and the compn. is ready for detonation. Three formulations differing only in degree of aeration and hence sp. gr. (1.05, 1.20, and 1.25) were prepd. from H₂O 16.0, NH₄NO₃ 61.0, NaNO₂ 16.0, no. 2 fuel oil 5.0, a poly(oxyethylene)lauryl ether (HLB 16.9) 0.05, guar gum 1.5, K4P2O7 0.023, NH₄ sulfamate 0.33, NaNO₂ 0.10, and fumaric acid as required. They had an O balance of +0.3. The mixing temp. was 80°F, the slurries had pH's of 4.7, 3.9, and 3.9, resp., after 24 hr, and the gels were firm after 24 hr. The compns. had similar gel stabilities and high resistance to syneresis, compared with ethylene glycol-contg. slurries. Emulsifiers having a cyclic structure failed to sustain low syneresis.</p>				
ST	explosives syneresis resistance; fuel oil explosives; inorg salt slurry explosives; emulsifier slurry explosives				
IT	Hydrocarbon oils				
	RL: USES (Uses)				
	(gelling of emulsions of, with nitrates for syneresis prevention in explosives)				
IT	Explosives				
	(nitrate, gelling with hydrocarbon oil emulsions for syneresis prevention)				
IT	Emulsifying agents				
	(polyoxyethylene, for hydrocarbon oil fuels for gelling with nitrates in explosives)				
IT	Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy-, fatty glyceride deriv.				
	RL: USES (Uses)				
	(emulsifying agents, for hydrocarbon oil fuels for nitrate explosive gels with low syneresis)				
IT	29638-69-5				
	RL: MOA (Modifier or additive use); USES (Uses)				
	(crosslinking agents, in gelling of hydrocarbon oil fuel emulsions with nitrates for explosives with low syneresis)				

IT 1338-39-2 1338-43-8 9002-92-0 9004-99-3 9005-64-5 9005-65-6
9005-67-8 9005-70-3 61791-12-6
 RL: USES (Uses)
 (emulsifying agents, for hydrocarbon oil **fuels** for nitrate
 explosive gels with low syneresis)
 IT 6484-52-2, uses and miscellaneous 7631-99-4, uses and miscellaneous
 RL: USES (Uses)
 (gelling of, with hydrocarbon oil emulsions for explosives with low
 syneresis)

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	80.74	80.95
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-11.07	-11.07

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FILE CONTAINS CURRENT INFORMATION.
 LAST RELOADED: Sep 12, 2003 (20030912/UP).

=> file caplus wpids

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	1.68	82.63
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-11.07

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=> s tall oil and coal
 L3 230 TALL OIL AND COAL

=> d his

(FILE 'HOME' ENTERED AT 11:08:40 ON 20 SEP 2003)

FILE 'WPIDS, CAPLUS' ENTERED AT 11:08:59 ON 20 SEP 2003
 L1 1626 S WATER AND SURFACTANT AND GLYCERIDE
 L2 24 S L1 AND (FUEL OR COAL)

FILE 'STNGUIDE' ENTERED AT 11:10:11 ON 20 SEP 2003

FILE 'CAPLUS, WPIDS' ENTERED AT 11:26:51 ON 20 SEP 2003
 L3 230 S TALL OIL AND COAL

=> s 13 and 11
 L4 2 L3 AND L1

h ebc g cg b cg

eb

=> d 14 1-2 all

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2003:609731 CAPLUS
 DN 139:151702
 TI Methods of increasing flotation rate
 IN Yoon, Roe-Hoan
 PA USA
 SO U.S. Pat. Appl. Publ., 12 pp., Division of U.S. Ser. No. 573,441.
 CODEN: USXXCO
 DT Patent
 LA English
 IC ICM B03D001-14
 NCL 209164000
 CC 48-1 (Unit Operations and Processes)
 Section cross-reference(s): 49

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003146134	A1	20030807	US 2002-218979	20020814
PRAI	US 2000-573441	A3	20000516		

AB Methods of increasing the rate of sepg. hydrophobic and hydrophilic particles by flotation were developed. They are based on using appropriate reagents to enhance the hydrophobicity of the particles to be floated, so that they can be more readily collected by the air bubbles used in flotation. The hydrophobicity-enhancing reagents include low HLB **surfactants**, naturally occurring lipids, modified lipids, and hydrophobic polymers. These methods can greatly increase the rate of flotation for the particles that are usually difficult to float, such as ultrafine particles, coarse particles, middlings, and the particles that do not readily float in the **water** contg. large amts. of ions derived from the particles. New collectors for the flotation of phosphate minerals are disclosed.

ST flotation collector hydrophobic nonionic polymer **surfactant** HLB phosphate; nonionic **surfactant** fatty glycol **glyceride** ester amide amine lipid

IT Hydrophile-lipophile balance value
 (<15; methods of increasing flotation rate with hydrophobic neutral additives)

IT Amides, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkoxylated, ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (animal; methods of increasing flotation rate with hydrophobic neutral additives)

IT Polar solvents
 (aprotic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrocarbons, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (chloro; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation agents
 (collectors; methods of increasing flotation rate with hydrophobic neutral additives)

IT Lanolin
 RL: MOA (Modifier or additive use); USES (Uses)
 (derivs.; methods of increasing flotation rate with hydrophobic neutral additives)

IT Petroleum products

h eb c g cg b cg

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(distillates; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrophobicity
(enhanced by additives; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fatty acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(esters; methods of increasing flotation rate with hydrophobic neutral additives)

IT Glycols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(ethers; methods of increasing flotation rate with hydrophobic neutral additives)

IT Alcohols, uses
Amines, uses
Fatty acids, uses
Glycerides, uses
RL: MOA (Modifier or additive use); USES (Uses)
(ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Bituminous **coal**
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(fines; methods of increasing flotation rate with hydrophobic neutral additives)

IT Fats and Glyceridic oils, uses
RL: MOA (Modifier or additive use); USES (Uses)
(fish; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation agents
(frothers; methods of increasing flotation rate with hydrophobic neutral additives)

IT Ethers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(glyceryl; methods of increasing flotation rate with hydrophobic neutral additives)

IT Ethers, uses
RL: MOA (Modifier or additive use); USES (Uses)
(glycol; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Glycerides, uses**
RL: MOA (Modifier or additive use); USES (Uses)
(hydrogenated; methods of increasing flotation rate with hydrophobic neutral additives)

IT Particles
(hydrophobic and hydrophilic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Polymers, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(hydrophobic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Flotation
(increased rate of; methods of increasing flotation rate with hydrophobic neutral additives)

IT Clays, processes
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(kaolinitic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Esters, uses
RL: MOA (Modifier or additive use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(lard, Et esters; methods of increasing flotation rate with hydrophobic

neutral additives)

IT Hydrocarbon oils
RL: MOA (Modifier or additive use); USES (Uses)
(light oils; methods of increasing flotation rate with hydrophobic neutral additives)

IT Hydrocarbons, uses
RL: MOA (Modifier or additive use); USES (Uses)
(lower, aliph.; methods of increasing flotation rate with hydrophobic neutral additives)

IT Linear low density polyethylenes
RL: MOA (Modifier or additive use); USES (Uses)
(metallocene-catalyzed; methods of increasing flotation rate with hydrophobic neutral additives)

IT Bubbles
Diesel fuel
Ionic strength
Milling (size reduction)
Slurries
Solvents
(methods of increasing flotation rate with hydrophobic neutral additives)

IT Aromatic hydrocarbons, uses
Diglycerides
Ethers, uses
Fatty acids, uses
Glycerides, uses
Glycols, uses
Kerosene
Ketones, uses
Ligroine
Lime (chemical)
Monoglycerides
Naphtha
Polysilanes
Soybean oil
RL: MOA (Modifier or additive use); USES (Uses)
(methods of increasing flotation rate with hydrophobic neutral additives)

IT Anthracite
Coal, processes
Copper ores, processes
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(methods of increasing flotation rate with hydrophobic neutral additives)

IT Lipids, uses
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(naturally occurring and modified; methods of increasing flotation rate with hydrophobic neutral additives)

IT **Surfactants**
(nonionic; methods of increasing flotation rate with hydrophobic neutral additives)

IT Minerals, processes
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(phosphate; methods of increasing flotation rate with hydrophobic neutral additives)

IT Copper ores, processes
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(porphyry; methods of increasing flotation rate with hydrophobic neutral additives)

IT Amides, uses

- RL: MOA (Modifier or additive use); USES (Uses)
(reaction products from **glycerides**; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Glycerides**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(reaction products from thioesterification; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Alcohols**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(short-chain, C1-7; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Polymers**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(silicon-contg.; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Fatty acids**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(**tall-oil**; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Particles**
(ultrafine; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Fats and Glyceridic oils**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(vegetable, ethoxylated; methods of increasing flotation rate with hydrophobic neutral additives)
- IT **Fats and Glyceridic oils**, uses
RL: MOA (Modifier or additive use); USES (Uses)
(vegetable; methods of increasing flotation rate with hydrophobic neutral additives)
- IT 64-19-7, Acetic acid, uses
RL: CAT (Catalyst use); MOA (Modifier or additive use); USES (Uses)
(methods of increasing flotation rate with hydrophobic neutral additives)
- IT 50-99-7D, Glucose, esters of 56-23-5, Carbon tetrachloride, uses
57-50-1D, Sucrose, esters of 67-68-5, Dimethyl sulfoxide, uses
68-12-2, Dimethylformamide, uses 75-15-0, Carbon disulfide, uses
107-97-1D, Sarcosine, derivs. 872-50-4, N-Methylpyrrolidone, uses
1336-21-6, Ammonium hydroxide 1338-43-8, Span 80 1344-09-8, Sodium silicate 2720-73-2, Potassium amyl xanthate 5116-94-9 7664-38-2D, Phosphoric acid, esters 9002-88-4D, Polyethylene, derivs. 9004-73-3D, Poly(methylhydrosiloxane), derivs. 12441-09-7D, Sorbitan, derivs. 572924-33-5, Shellfloat 758 572924-40-4, Aero 6973
RL: MOA (Modifier or additive use); USES (Uses)
(methods of increasing flotation rate with hydrophobic neutral additives)
- IT 1308-56-1P, Chalcopyrite, processes 1309-56-4P, Molybdenite 1314-56-3P, Diphosphorus pentaoxide (P2O5), processes 7782-42-5P, Graphite, processes 14807-96-6P, Talc, processes
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); PREP (Preparation); PROC (Process)
(methods of increasing flotation rate with hydrophobic neutral additives)
- IT 1317-70-0, Anatase 1332-37-2, Iron oxide, processes
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); REM (Removal or disposal); PROC (Process)
(methods of increasing flotation rate with hydrophobic neutral additives)

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
AN 2003:609679	CAPLUS
DN 139:135902	

AN 2003:609679 CAPLUS
DN 139:135902

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eb

TI **Tall-oil** pitch-based and **glyceride**-based chemical change agent for
production of solid **coal**-based synthetic fuel briquets
IN Giampa, Vince M.; Dubiel, John T.; Lyons, Orville
PA Ceredo Liquid Terminal Inc., USA
SO U.S. Pat. Appl. Publ., 6 pp.
CODEN: USXXCO

DT Patent

LA English

IC ICM C10L005-14

ICS C10L005-44; C10L005-16

NCL 044565000; 044577000

CC 51-15 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 45

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003145516	A1	20030807	US 2002-68285	20020205
PRAI	US 2002-68285		20020205		

AB A chem. change agent for prepn. of **coal**-based synthetic fuel briquets
consists of **water** 0-70, **tall oil** and **tall-oil** pitch 0-60,
C16-18-**glycerides** 0.25-40, and **surfactants** 0.25-4 wt.%, with 50-200
cP, sulfur content <0.2 wt.%, and closed cup flash point >200°, and
can be stable when stored as an emulsion at 21-71°. The chem.
change agent is produced by first heating a **tall-oil** pitch to
>93° and adding **water**, **glycerides**, and **surfactant** to form an
emulsion. The **coal**-based synthetic fuel briquets are then prepd. from
98.8-99.5 wt.% **coal** and 0.5-1.2 wt.% of the above emulsion, followed by
pressing the mixt. to briquets.

ST **coal** briquet synthetic fuel **tall oil** pitch; **glyceride** **tall oil**
pitch **coal** synthetic fuel

IT **Glycerides**, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(C16-18, emulsions; **tall-oil** pitch-based and
glyceride-based chem. change agent for prodn. of solid
coal-based synthetic fuel briquets)

IT Fuel briquets

(**coal**-based solids; **tall-oil** pitch-based
and **glyceride**-based chem. change agent for prodn. of solid
coal-based synthetic fuel briquets)

IT Corn oil

Cottonseed oil

Palm oil

Soybean oil

Tall oil

Tall oil pitch

RL: TEM (Technical or engineered material use); USES (Uses)
(emulsions; **tall-oil** pitch-based and
glyceride-based chem. change agent for prodn. of solid
coal-based synthetic fuel briquets)

IT Fuels

(synthetic, solid briquets; **tall-oil** pitch-based
and **glyceride**-based chem. change agent for prodn. of solid
coal-based synthetic fuel briquets)

IT **Surfactants**

(**tall-oil** pitch-based and **glyceride**-based
chem. change agent for prodn. of solid **coal**-based synthetic
fuel briquets)

IT Fats and Glyceridic oils, uses

RL: TEM (Technical or engineered material use); USES (Uses)
(vegetable, emulsions; **tall-oil** pitch-based and
glyceride-based chem. change agent for prodn. of solid
coal-based synthetic fuel briquets)

=> s tall oil and glyceride

L5 208 TALL OIL AND GLYCERIDE

=> s l5 and (water or emulsion)

L6 68 L5 AND (WATER OR EMULSION)

=> d his

(FILE 'HOME' ENTERED AT 11:08:40 ON 20 SEP 2003)

FILE 'WPIDS, CAPLUS' ENTERED AT 11:08:59 ON 20 SEP 2003

L1 1626 S WATER AND SURFACTANT AND GLYCERIDE

L2 24 S L1 AND (FUEL OR COAL)

FILE 'STNGUIDE' ENTERED AT 11:10:11 ON 20 SEP 2003

FILE 'CAPLUS, WPIDS' ENTERED AT 11:26:51 ON 20 SEP 2003

L3 230 S TALL OIL AND COAL

L4 2 S L3 AND L1

L5 208 S TALL OIL AND GLYCERIDE

L6 68 S L5 AND (WATER OR EMULSION)

=> s l6 not l2

L7 65 L6 NOT L2

=> d l7 1-65 ti

L7 ANSWER 1 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Process for the enzymic generation and recovery of fatty acid hydroperoxides

L7 ANSWER 2 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Stain resistant treatment for porous substrates

L7 ANSWER 3 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

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References

TI Compositions and method for targeted controlled delivery of active ingredients and sensory markers onto hair, skin, and fabric

L7 ANSWER 4 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Manufacture of aqueous dispersions of alkyd resins using internal emulsifiers

L7 ANSWER 5 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Chlorine-free extreme-pressure additives for vegetable oil-based, especially soybean oil-based, metalworking lubricating oils

L7 ANSWER 6 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Manufacture of monoglycerides without using catalysts and their use as oiliness improvers

L7 ANSWER 7 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Process for producing carotenoid emulsion

L7 ANSWER 8 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Effects of wood polysaccharides on pitch deposition

L7 ANSWER 9 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Article having a transferable breathable skin care composition thereon

L7 ANSWER 10 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Stable emulsions from gelled overbased substrates with surfactants and aqueous liquids

L7 ANSWER 11 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Lubricant for drilling fluids

L7 ANSWER 12 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Invert emulsion drilling fluids having negative alkalinity

L7 ANSWER 13 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Preparation of biodegradable polymer dispersions and their use

L7 ANSWER 14 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Compositions and method for simultaneously improving the flexural bond strength and water repellency of mortar, and cementitious mixtures containing the compositions

L7 ANSWER 15 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI An oil-in-water emulsion for use on human skin for cleansing, preserving or improving the condition of the skin

L7 ANSWER 16 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Solventless hydrophobic biodegradable polymer dispersions, their manufacture and uses

L7 ANSWER 17 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Water-based polymer dispersion adhesives containing natural resins and oils

L7 ANSWER 18 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Polymeric industrial material based on swellable natural material and its manufacture and use

L7 ANSWER 19 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Aqueous lecithin-based release aids and methods of using the same

L7 ANSWER 20 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Lipid-based composition containing diacylglycerol, phospholipid, polar liquid and biologically active material

L7 ANSWER 21 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Ammonium nitrate **emulsion** explosive composition variations containing sodium or potassium nitrate, industrial oil or mazut, sodium nitrite, and, as emulsifier, C14-24 or **tall-oil glycerides**, and, optionally, as sensitizier, microspheres of resins, glass, or expanded polystyrene, or polystyrene and aluminum

L7 ANSWER 22 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Flotation deinking of media printed with hydrophilic flexographic inks

L7 ANSWER 23 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Overbased carboxylates and gels

L7 ANSWER 24 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Confectionery compressed tablets with controlled flavor release

L7 ANSWER 25 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Stable microbicidal compositions containing TCMTB

L7 ANSWER 26 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Cationic emulsifiers and their use in making aqueous bituminous **emulsions** and pavement-sealing **emulsion**-aggregate slurries

L7 ANSWER 27 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Additives to polyester tire yarn overfinish to reduce dip penetration

L7 ANSWER 28 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Homogeneous stabilizer compositions for vinyl halide polymers

L7 ANSWER 29 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Composition for impregnating and staining of wood

L7 ANSWER 30 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Additives for polyester tire yarn overfinishes to reduce dip penetration

L7 ANSWER 31 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Liquid soap

L7 ANSWER 32 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Defoaming agents for processing pulp

L7 ANSWER 33 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Phenolic resins

L7 ANSWER 34 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Acrylamide-modified **water**-thinned coating materials

L7 ANSWER 35 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Composition for treating leather

L7 ANSWER 36 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Control of oils floating on **water**

L7 ANSWER 37 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Lightweight, rigid asbestos-cement products

L7 ANSWER 38 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Polyurethane foam

L7 ANSWER 39 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Heat sealable poly(vinylidene chloride) film coated with a fatty acid salt

L7 ANSWER 40 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Polyurethane foam

L7 ANSWER 41 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Rigid polyurethane foams

L7 ANSWER 42 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI **Water** emulsion type printing inks

L7 ANSWER 43 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing

References

TI Polyester coating compositions

L7 ANSWER 44 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Reforming polymerization of **tall-oil glyceride** and its mixtures with cuttlefish oils by silent electrical discharge

L7 ANSWER 45 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Fermentation of long-chain compounds by *Torulopsis magnoliae*. II. Factors influencing production of hydroxy fatty acid glycosides

L7 ANSWER 46 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI **Water**-base drilling muds

L7 ANSWER 47 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Cyclic aluminum oxide acylates, alkoxides, and phenoxides

L7 ANSWER 48 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Fractionation of oils by selective extraction

L7 ANSWER 49 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Oil-modified alkyd-resin mixtures

L7 ANSWER 50 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Use of Bulgarian **tall oil** in paint and varnish making

L7 ANSWER 51 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Copolymers of vinyl aromatic compound, fatty acid ester of epoxy resin, and a vegetable oil

L7 ANSWER 52 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Coating compositions from fatty acids

L7 ANSWER 53 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Demulsification agents for treating petroleum **emulsions**

L7 ANSWER 54 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI Polyamides

L7 ANSWER 55 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Citing
References

TI **Tall oil** fat acids with regard to chemistry and paint technology

- L7 ANSWER 56 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Preparation of a fat composition, useful as a food product, comprises direct interesterification of a sterol raw material with a triglyceride raw material.
- L7 ANSWER 57 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Organic molybdenum complexes used as multifunctional additives for lubricants, e.g. lubricating oil for automobiles, comprises reaction product of fatty oil(s), mono-alkylated alkylene diamine(s) and molybdenum source.
- L7 ANSWER 58 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Compound for low odor paper products comprises a **water** soluble/dispersible imidazoline having low odor.
- L7 ANSWER 59 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Invert **emulsion** drilling fluid with negative alkalinity for drilling subterranean wells comprises an oleaginous phase, a non-oleaginous phase and an emulsifying agent.
- L7 ANSWER 60 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Partial **glycerides** of fatty acid derivatives are used as lubricant in borehole flushing fluids containing **water** and separate oil phase.
- L7 ANSWER 61 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Production of an amide defoamer composition using a high energy, in-line mixer having a rotor-stator assembly for **water** based systems.
- L7 ANSWER 62 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Aq. polyurethane dispersion with epoxidised fatty acid ester - ring-opened with carboxylic acid as poly ol component, prepn. and use in dressing leather.
- L7 ANSWER 63 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Reducing dip penetration in polyester yarns for tyre cords - by including paraffin wax in specified prior art over-finish **emulsions**.
- L7 ANSWER 64 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Detergent compsn. with improved washing power - contg. organic surfactant, synthetic zeolite builder and **water**-soluble salt of ethylene -unsatd. di carboxylic acid copolymer and olefin.
- L7 ANSWER 65 OF 65 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
 TI Agglomerating and removal of oil slicks - using a compsn. comprising soln. of drying oil in alcohol, ester, ketone or ether.

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L7 ANSWER 5 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

	Full Text	Citing References
AN	2003:202749	CAPLUS
DN	138:223992	
TI	Chlorine-free extreme-pressure additives for vegetable oil-based, especially soybean oil-based, metalworking lubricating oils	
IN	King, James P.; Canter, Neil	
PA	United Soy Bean Board, USA	
SO	PCT Int. Appl., 32 pp. CODEN: PIXXD2	
DT	Patent	
LA	English	
IC	ICM C10M105-38	
ICS	C10M169-06; C10M135-02; C10M137-08	

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CC 51-8 (Fossil Fuels, Derivatives, and Related Products)

Section cross-reference(s): 45

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003020855	A1	20030313	WO 2002-US25514	20020813
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRAI US 2001-316971P P 20010905

AB A vegetable oil-based lubricating oil consists of a vegetable oil and a phosphorus-based polar chlorine-free extreme pressure additive, such that the compn. has a load wear index of ≥ 40 and a weld point of ≥ 315 kg, both measured in a four-ball test (ASTM D 2783), and a Falex extreme-pressure failure load of ≥ 4500 lbs (ASTM D 3233). Suitable vegetable oils include soybean oil, coconut oil, rape oil, canola oil, peanut oil, sunflower oil, and crambe oil (preferably soybean oil). The polar non-chlorine extreme-pressure additives include amine phosphates, alkylamine or alkanolamine phosphate salts, organophosphites, triethanolamine, ethanolamine, thioesters, sulfurized fatty esters, sulfurized hydrocarbons, sulfurized **glycerides**, and alkyl polysulfides. The compns. can also contain other additives, such as thickeners, surfactants or coupling agents, antioxidants, dispersants, corrosion inhibitors, and emulsifiers. A suitable general compn. is vegetable oil 5-90, the above extreme-pressure additives 3-20, **water** 10, coupling agents <10, corrosion inhibitors 5-40, biocides <10, emulsifiers 10-50, antioxidants <6, and defoamers <5 wt.%.
 ST **glyceride** metalworking fluid extreme pressure additive; soybean oil metalworking fluid extreme pressure additive; nonchlorine extreme pressure additive soybean oil metalworking
 IT Soybean oil
 RL: MOA (Modifier or additive use); USES (Uses)
 (Me ester, Soygold 1000, base oils; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
 IT Amides, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (N-(hydroxyethyl), surfactants and coupling agents; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
 IT Polysulfides
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkyl, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
 IT Lubricating oil additives
 (antioxidants, metalworking, for vegetable base oils; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
 IT Amines, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (arom., antioxidants; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
 IT Canola oil

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Coconut oil
Glycerides, uses
Peanut oil
Rape oil
Soybean oil
Sunflower oil
RL: TEM (Technical or engineered material use); USES (Uses)
(base oil; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Corrosion inhibitors
(chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Phosphorus acids
RL: MOA (Modifier or additive use); USES (Uses)
(compds. with amides; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Amides, uses
RL: MOA (Modifier or additive use); USES (Uses)
(compds. with phosphorus acids, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT **Glycerides**, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(crambe, base oil; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Fatty acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(esters, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Fatty acids, uses
RL: MOA (Modifier or additive use); USES (Uses)
(esters, sulfurized, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Polyoxyalkylenes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(esters, surfactants and coupling agents; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Lubricating oil additives
(extreme-pressure, non-chlorine, metalworking, for vegetable base oils; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Phenols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(hindered, antioxidants; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Lubricating oil additives
(metalworking oil additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Lubricating oils
(metalworking; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Soybean oil
RL: TEM (Technical or engineered material use); USES (Uses)
(oxidized, base oil; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

IT Castor oil

- Fats and Glyceridic oils, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (oxidized, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Polyesters, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (polymers with styrene, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT **Glycerides**, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (polymers, telomers, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Fatty acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (soya, Me esters, base oils; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Alkenes, uses
Glycerides, uses
 Hydrocarbons, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (sulfurized, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Fatty acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (**tall-oil**; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Amines, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (tallow alkyl; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Lubricating oil additives
 (thickeners, metalworking, for vegetable base oils; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Butadiene rubber, uses
 Styrene-butadiene rubber, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Esters, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (thio, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Fats and Glyceridic oils, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (vegetable, extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT Fats and Glyceridic oils, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (vegetable, oxidized, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 123-56-8D, Succinimide, derivs.
 RL: MOA (Modifier or additive use); USES (Uses)
 (antioxidants; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)

- IT 9003-17-2
RL: MOA (Modifier or additive use); USES (Uses)
(butadiene rubber, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 1310-58-3, Potassium hydroxide, uses
RL: MOA (Modifier or additive use); USES (Uses)
(chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 501033-77-8, Gateway CP 105
RL: MOA (Modifier or additive use); USES (Uses)
(corrosion inhibitor; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 4719-04-4 80893-25-0, Petromix 9 121273-59-4, M 28B
RL: MOA (Modifier or additive use); USES (Uses)
(emulsifier; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 215501-37-4 500995-66-4
RL: MOA (Modifier or additive use); USES (Uses)
(extreme-pressure additive; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 7664-38-2D, Phosphoric acid, compds. with alkyl amines and alkanolamines
7664-38-2D, Phosphoric acid, esters 10017-56-8, Triethanolamine phosphate 13598-36-2D, Phosphonic acid, alkyl, alkanolamine esters 25496-72-4, Glycerol monooleate 29868-05-1, Ethanolamine phosphate 34655-69-1, Dibutyl amine phosphate 41035-89-6 67952-32-3 126340-31-6, Vanlube 672 501033-37-0, Desilube 77 501033-50-7, Additin RC 2515 501033-51-8, Additin RC 2526 501033-52-9, Lubrizol 5340L 501033-75-6, Lubrophos LL 550 501033-76-7, Elco 670
RL: MOA (Modifier or additive use); USES (Uses)
(extreme-pressure additives; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 9003-55-8
RL: MOA (Modifier or additive use); USES (Uses)
(styrene-butadiene rubber, thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 9005-65-6, Tween 80 9016-45-9, Igepal CO
RL: MOA (Modifier or additive use); USES (Uses)
(surfactant; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 57-55-6, Propylene glycol, uses 25322-68-3D, Polyethylene glycol, esters 37318-79-9, Sorbitan oleate
RL: MOA (Modifier or additive use); USES (Uses)
(surfactants and coupling agents; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- IT 79-41-4D, Methacrylic acid, alkyl esters, polymers 9003-27-4, Polyisobutylene 9010-79-1, Ethylene-propylene copolymer
RL: MOA (Modifier or additive use); USES (Uses)
(thickeners; chlorine-free extreme-pressure additives for vegetable oil-based, esp. soybean oil-based, metalworking lubricating oils)
- RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
- RE
- (1) Camenzind; US 5320764 A 1994 CAPLUS
 - (2) Fletschinger; US 20020016266 A1 2002
 - (3) Griffith; US 5552068 A 1996 CAPLUS
 - (4) Kuwamoto; US 4637885 A 1987 CAPLUS
 - (5) Watson; US 2882228 A 1959 CAPLUS

L7 ANSWER 11 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

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Full Text	Citing References
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AN 2000:335754 CAPLUS
 DN 132:336696
 TI Lubricant for drilling fluids
 IN Mueller, Heinz; Herold, Claus-Peter; Bongardt, Frank; Herzog, Nadja; Von Tapavicza, Stephan
 PA Cognis Deutschland G.m.b.H., Germany
 SO Ger. Offen., 8 pp.
 CODEN: GWXXBX
 DT Patent
 LA German
 IC ICM C09K007-00
 ICS C10M105-40; E21B021-00
 CC 51-2 (Fossil Fuels, Derivatives, and Related Products)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19852971	A1	20000518	DE 1998-19852971	19981117
	WO 2000029502	A1	20000525	WO 1999-EP8532	19991106
	W: AU, BR, CA, NO, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	BR 9915438	A	20010807	BR 1999-15438	19991106
	EP 1137736	A1	20011004	EP 1999-955958	19991106
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AU 756915	B2	20030123	AU 2000-12696	19991106
	NO 2001002430	A	20010702	NO 2001-2430	20010516
PRAI	DE 1998-19852971	A	19981117		
	WO 1999-EP8532	W	19991106		

AB Partial **glycerides** of predominantly unsatd. C16-24 fatty acids, optionally mixed with anionic surfactants, are used as a lubricant for drilling fluids which contain **water** and optionally a sep. oil phase. The partial **glycerides** do not generate harmful foams, are nontoxic, are biodegradable, and can be used at low temps.

ST **glyceride** partial lubricant drilling fluid
 IT Fatty acids, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (C12-24, sulfonated; in lubricant for drilling fluids)
 IT **Glycerides**, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (C16-24 unsatd., fatty acid; lubricant for drilling fluids)
 IT Surfactants
 (anionic; in lubricant for drilling fluids)
 IT Drilling fluids
 (partial **glycerides** as lubricant for)
 IT Castor oil
 RL: TEM (Technical or engineered material use); USES (Uses)
 (sulfated; lubricant for drilling fluids)
 IT Soybean oil
 RL: TEM (Technical or engineered material use); USES (Uses)
 (sulfonates; lubricant for drilling fluids)
 IT **Glycerides**, uses
 RL: TEM (Technical or engineered material use); USES (Uses)
 (tall-oil, mono- and di-; lubricant for drilling fluids)

L7 ANSWER 12 OF 65 CAPLUS COPYRIGHT 2003 ACS on STN

Full Text	Citing References
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AN 2000:335496 CAPLUS
 DN 132:350007
 TI Invert **emulsion** drilling fluids having negative alkalinity

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IN Patel, Arvind D.
 PA M-I L.L.C., USA
 SO PCT Int. Appl., 38 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 IC ICM C09K007-06
 CC 51-2 (Fossil Fuels, Derivatives, and Related Products)
 FAN.CNT 6

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000027945	A1	20000518	WO 1999-US26639	19991112
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1129148	A1	20010905	EP 1999-958894	19991112
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	NO 2001002362	A	20010712	NO 2001-2362	20010514
PRAI	US 1998-190783	A	19981112		
	WO 1999-US26639	W	19991112		
OS	MARPAT 132:350007				
AB	An invert emulsion suitable for drilling subterranean wells, in particular oil and gas wells is disclosed which has neg. alky. and includes an oleaginous phase, and a non-oleaginous phase and an emulsifying agent which stabilizes the invert emulsion under conditions of neg. alky. The practice of the present invention permits the formulation of drilling fluids which are absent an alk. reserve and yet are suitable for drilling oil and gas wells.				
ST	invert emulsion drilling fluid neg alky				
IT	Acetals Esters, uses Ethers, uses RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses) (aliph.; invert emulsion drilling fluids having neg. alky.)				
IT	Fatty acids, uses RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses) (coco, Me esters; invert emulsion drilling fluids having neg. alky.)				
IT	Fatty acids, uses RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (coco, esters, C1-12 alkyl esters; invert emulsion drilling fluids having neg. alky.)				
IT	Amines, uses RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (hydrogenated tallow alkyl, acetates; invert emulsion drilling fluids having neg. alky.)				
IT	Diesel fuel Emulsifying agents (invert emulsion drilling fluids having neg. alky.)				
IT	Tall oil RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (invert emulsion drilling fluids having neg. alky.)				

IT **Glycerides**, uses
 RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
 (invert **emulsion** drilling fluids having neg. alky.)

IT Drilling fluids
 (inverted **emulsions**; invert **emulsion** drilling fluids having neg. alky.)

IT Fatty acids, uses
 RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
 (tall-oil; invert **emulsion** drilling fluids having neg. alky.)

IT 64-19-7, Acetic acid, uses 13462-86-7, Barite 184786-01-4, Versalig 269065-35-2, Ecogreen F
 RL: MOA (Modifier or additive use); USES (Uses)
 (invert **emulsion** drilling fluids having neg. alky.)

IT 221902-96-1, VG Plus
 RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
 (invert **emulsion** drilling fluids having neg. alky.)

IT 112-80-1D, Oleic acid, C1-12 alkyl esters 544-63-8D, Myristic acid, C1-12 alkyl esters 28299-33-4, Novawet 136753-47-4, VersaCoat 269065-30-7, Ecogreen P 269065-34-1, Ecogreen S 269065-57-8, EMI 545 269065-58-9, Novathin 269065-59-0, EMI 524
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (invert **emulsion** drilling fluids having neg. alky.)

IT 112-62-9, Methyl oleate 504-75-6D, Imidazoline, derivs. 10043-52-4, Calcium chloride, uses 120961-98-0, Finagreen BDMF
 RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses)
 (invert **emulsion** drilling fluids having neg. alky.)

IT 1302-93-8, Mullite 1332-37-2, Iron oxide, uses 11129-60-5, Manganese oxide 13397-26-7, Calcite, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (weighting agent; invert **emulsion** drilling fluids having neg. alky.)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE

- (1) Foley, J; US 3728277 1973 CAPLUS
- (2) Henkel, K; EP 0382070 A 1990 CAPLUS
- (3) Henkel, K; EP 0382071 A 1990 CAPLUS
- (4) Henkel, K; EP 0386638 A 1990 CAPLUS
- (5) Hoeppel, R; FR 1441299 A CAPLUS

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Full Text	Citing References
AN 1998:112195 CAPLUS	
DN 128:196474	
TI An oil-in-water emulsion for use on human skin for cleansing, preserving or improving the condition of the skin	
IN Hyldgaard, Jorgen; Larsen, Jimmi; Jensen, Anette Severin	
PA Plum Kemi Produktion A/S, Den.; Hyldgaard, Jorgen; Larsen, Jimmi; Jensen, Anette Severin	
SO PCT Int. Appl., 77 pp. CODEN: PIXXD2	
DT Patent	
LA English	
IC ICM A61K007-00 ICS A61K007-48; A61K007-50; A61K007-40; A61K007-42	
CC 62-4 (Essential Oils and Cosmetics)	
FAN.CNT 1	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	WO 9805294	A1	19980212	WO 1997-DK324	19970801
	W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, ES, FI, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9736920	A1	19980225	AU 1997-36920	19970801
	EP 915693	A1	19990519	EP 1997-933638	19970801
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	BR 9711019	A	19990817	BR 1997-11019	19970801
	CN 1226816	A	19990825	CN 1997-196982	19970801
	US 6342208	B1	20020129	US 1999-230777	19990308
PRAI	DK 1996-828	A	19960802		
	DK 1996-1465	A	19961220		
	WO 1997-DK324	W	19970801		
AB	Disclosed is an oil-in-water emulsion, esp. for use on mammalian skin, in particular on human skin, or hair in order to cleanse the skin or hair, remove dirt, etc., and/or to preserve or improve the condition of the skin, and/or to prevent or treat various skin conditions such as, e.g., dry skin, irritated skin or otherwise traumatized skin. Upon application on a skin surface and following rinsing or flushing the skin surface with a liq., the oil-in-water emulsion separates into at least two distinct phases and leaves a protective layer on the skin comprising at least a part of the oily phase. The oil-in-water emulsion also has useful properties with respect to protection of the skin against sun light and with respect to combating attack from parasites like lice, fleas and scabies on mammals such as humans, domestic animals and pets. Also disclosed is a skin-friendly lipid, namely Meadowfoam seed oil, as a therapeutic agent, and as an agent which in itself in synergistic effect with other constituents is effective against mammalian parasites, esp. from the phylum Arthropoda, and as an agent which is effective as a sunscreen or a UV-A, UV-B or UV-C filter. A skin-cleansing emulsion contained water 57.94, Na4EDTA 0.31, citric acid 0.5, MEA (99%) 2.4, KOH (46%) 0.16, palmitic acid 11.38, glycerol tricaprilate/caprinate 13.82, sulfated castor oil 2.24, parabens 0.73, Tegobetain F50 (cocoamidopropyl betaine) 5.36, Meadowfoam seed triglycerides 4.47, Lutensol TO3 (C9-11 Pareth) 0.69 %.				
ST	skin cleanser emulsion meadowfoam seed oil				
IT	Fats and Glyceridic oils, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(Limnanthes alba seed; oil-in-water cosmetic cleansing emulsions for improving skin conditions)				
IT	Fats and Glyceridic oils, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(almond; oil-in-water cosmetic cleansing emulsions for improving skin conditions)				
IT	Betaines				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(amido; oil-in-water cosmetic cleansing emulsions for improving skin conditions)				
IT	Fats and Glyceridic oils, biological studies				
	RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
	(animal; oil-in-water cosmetic cleansing emulsions for improving skin conditions)				

IT Fats and Glyceridic oils, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (apricot kernel; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)

IT Fats and Glyceridic oils, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (avocado; oil-in-water cosmetic cleansing **emulsions**
 for improving skin conditions)

IT Willow (Salix)
 (bark, exts.; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)

IT Cosmetics
 (cleansing; oil-in-water cosmetic cleansing **emulsions**
 for improving skin conditions)

IT Balsams
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (copaiba, exts.; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)

IT Actinidia chinensis
 Aloe barbadensis
 Apricot (Prunus armeniaca)
 Arnica montana
 Bamboo
 Bearberry
 Beet
 Bilberry
 Birch (Betula)
 Blackberry
 Buckwheat (Fagopyrum esculentum)
 Burdock
 Calendula
 Capsicum frutescens
 Carrot
 Centaurea cyanus
 Cherimoya (Annona cherimola)
 Coix lacryma-jobi
 Coltsfoot
 Comfrey (Symphytum)
 Coneflower
 Cucumber (Cucumis sativus)
 Equisetum
 Fennel (Foeniculum vulgare)
 Fucus vesiculosus
 Ginger
 Ginkgo
 Ginseng (Panax)
 Guarana (Paullinia cupana)
 Hawthorn (Crataegus monogyna)
 Hay
 Hop (Humulus)
 Horse chestnut (Aesculus)
 Hydrocotyle
 Ivy (Hedera)
 Jujube (Zizyphus)
 Juniper (Juniperus communis)
 Laminaria digitata
 Lavender (Lavandula)
 Lawsonia inermis
 Lemon (Citrus limon)
 Licorice (Glycyrrhiza)
 Linden (Tilia)

Lithospermum officinale
 Mallow (Malva)
 Mango (Mangifera indica)
 Marshmallow (Althaea officinalis)
 Matricaria
 Melon (plant)
 Mimosa tenuiflora
 Mint
 Oak (Quercus alba)
 Oak (Quercus robur)
 Oyster
 Peach (Prunus persica)
 Peppermint (Mentha piperita)
 Quillaja saponaria
 Raspberry
 Rhatany (Krameria triandra)
 Rosemary
 Ruscus aculeatus
 Sage (Salvia)
 Soapwort
 St.-John's-wort (Hypericum)
 Stinging nettle
 Strawberry
 Tea (Camellia sinensis)
 Thyme (Thymus)
 Viola tricolor
 Walnut
 Watercress
 Witch hazel
 (exts.; oil-in-water cosmetic cleansing **emulsions**
 for improving skin conditions)
 IT Shea tree (Butyrospermum parkii)
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (exts.; oil-in-water cosmetic cleansing **emulsions**
 for improving skin conditions)
 IT Amides, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (fatty; oil-in-water cosmetic cleansing **emulsions**
 for improving skin conditions)
 IT Fats and Glyceridic oils, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (fish; oil-in-water cosmetic cleansing **emulsions**
 for improving skin conditions)
 IT Wheat
 (germ, exts.; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)
 IT Fats and Glyceridic oils, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (grape seed; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)
 IT Rose (Rosa)
 (hips, exts.; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)
 IT Coconut oil
 Coconut oil
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (hydrogenated; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)
 IT Glycerides, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(long-chain; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)

IT Insect repellents
Sunscreens
(oil-in-water cosmetic cleansing **emulsions** for
improving skin conditions)

IT Betaines
Castor oil
Cocoa butter
Corn oil
Cottonseed oil
Diglycerides
Disinfectants
Glycerides, biological studies
Jojoba oil
Lanolin
Linseed oil
Monoglycerides
Olive oil
Palm oil
Peanut oil
Rape oil
Soybean oil
Sulfobetaines
Sunflower oil
Tall oil
Vitamins

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(oil-in-water cosmetic cleansing **emulsions** for
improving skin conditions)

IT Fats and Glyceridic oils, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(poppyseed; oil-in-water cosmetic cleansing **emulsions**
for improving skin conditions)

IT Arthropod (Arthropoda)
Flea (Siphonaptera)
Louse
(repellent to; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)

IT Fatty acids, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(salts; oil-in-water cosmetic cleansing **emulsions**
for improving skin conditions)

IT Skin, disease
(scabies, repellent to; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)

IT Fats and Glyceridic oils, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(sesame; oil-in-water cosmetic cleansing **emulsions**
for improving skin conditions)

IT Fats and Glyceridic oils, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
(shea butter; oil-in-water cosmetic cleansing
emulsions for improving skin conditions)

IT Castor oil

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

- (sulfated; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(thistle; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(vegetable, hydrogenated; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(walnut; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(whale; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT Fats and Glyceridic oils, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(wheat germ; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT 29777-99-9D, coco derivs., quaternized
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(betaine; oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- IT 56-86-0D, Glutamic acid, N-acyl derivs. 57-10-3, Hexadecanoic acid, biological studies 57-11-4, Octadecanoic acid, biological studies 60-33-3, Linoleic acid, biological studies 107-35-7D, Taurine, N-alkyl derivs. 107-36-8D, Isethionic acid, esters 107-43-7D, Betaine, coco amido Pr derivs. 112-38-9, 10-Undecenoic acid 112-79-8, Elaidic acid 112-80-1, 9-Octadecenoic acid (Z)-, biological studies 112-85-6, Behenic acid 112-86-7, Erucic acid 143-07-7, Lauric acid, biological studies 334-48-5, Decanoic acid 373-49-9, Palmitoleic acid 463-40-1 506-30-9, Arachidic acid 506-33-2, Brassidic acid 544-63-8, Myristic acid, biological studies 557-59-5, Lignoceric acid 683-10-3 693-33-4 1323-38-2, Glycerin monoricinoleate 2281-11-0 3546-96-1, Sodium 3-dodecylaminopropionate 5138-18-1D, Sulfosuccinic acid, esters 7425-12-9 7664-38-2D, Phosphoric acid, esters, biological studies 7664-93-9D, Sulfuric acid, alkyl esters, biological studies 9004-84-6, Trideceth sulfate 10471-50-8 13177-41-8 24170-14-7 34870-92-3D, Polyethylene glycol sulfate, alkyl derivs. 52562-22-8 52665-42-6 123875-62-7 180968-46-1 203796-69-4 203796-70-7 203796-71-8 203796-72-9 203796-73-0 203796-74-1 203796-75-2
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(oil-in-water cosmetic cleansing emulsions for improving skin conditions)
- RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
- (1) Anon; PATENT ABSTRACTS OF JAPAN 1983, V007(259), PC-195
 - (2) Anon; PATENT ABSTRACTS OF JAPAN 1987, V011(394), PC-465
 - (3) Anon; PATENT ABSTRACTS OF JAPAN 1989, V013(417), PC-636
 - (4) Colgate Palmolive Co; WO 9517163 A 1995 CAPLUS
 - (5) Du; WO 9321293 A 1993 CAPLUS
 - (6) Erickson, F; US 5023312 A 1991 CAPLUS
 - (7) Henkel Kgaa; EP 0111895 A 1984 CAPLUS
 - (8) Imperante, J; US 5382381 A 1995 CAPLUS

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 (11) Oreal; EP 0145607 A 1985 CAPLUS
 (12) Oreal; EP 0628305 A 1994 CAPLUS
 (13) Procter & Gamble; WO 9632092 A 1996 CAPLUS
 (14) Richardson Vicks Inc; EP 0328355 A 1989 CAPLUS
 (15) Rocher Yves Biolog Vegetale; EP 0643960 A 1995 CAPLUS
 (16) Sederma Sa; FR 2676645 A 1992 CAPLUS
 (17) Tsumura & Co; JP 01153623 A 1989

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AN 1962:405447 CAPLUS	
DN 57:5447	
OREF 57:1181d-e	
TI Water -base drilling muds	
IN Rosenberg, Milton	
PA Gulf Research & Development Co.	
SO 5 pp.	
DT Patent	
LA Unavailable	
CC 52 (Petroleum and Petroleum Derivatives)	
PATENT NO. KIND DATE APPLICATION NO. DATE	

PI US 3027324 19620327 US 19581230	
AB An improved H2O-base drilling mud having lubricating properties is obtained by adding 0.5-2% by vol. of a sulfurized unsatd, fatty acid and its esters of >8 C atoms, a sulfurized rosin acid, a sulfurized fatty alc. of >11 C atoms, or a sulfurized and unsatd, fatty acid pitch to the base material. For example, the load-carrying capacities (Timken Lubricant Tester) of 6% bentonite-H2O suspensions contg. 0.5, 1.0, and 2.0% by vol. sulfurized tall oil (2.5% S) are >40, >100, and >100 lb., resp.	
IT Pitch	
(as stabilizer for ethylene polymers or propene polymers, sulfurized, as lubricant in drilling fluids)	
IT Drilling fluids or Drilling muds	
(lubricants in water -base, sulfurized unsatd. alcs., esters and fatty acids as)	
IT Fatty acids	
(pitch, sulfurized, as lubricant in drilling fluids)	
IT Fatty acids	
(sulfated and sulfonated, as lubricants in drilling fluids)	
IT Alcohols	
(sulfur-contg., as lubricants in drilling fluids)	
IT Lubricants	
(sulfurized unsatd. alcs., esters and fatty acids as, in drilling fluids)	
IT Esters	
(sulfurized unsatd., as lubricants in drilling fluids)	
IT Glycerides	
(sulfurized, as lubricants in drilling fluids)	
IT Resin acids or Rosin acids	
(sulfurized, as lubricants in drilling fluids)	

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